

Exercise 1: Corridor Modeling – Getting Started

E1.1 Copying ITL File to “Working” Folder

1.) Copy **TIP_rdy.itl** (Blank Project File) from:

C:\NCDOT_V8_WORKSPACE\ROADWAY_STDS\English\geopak\Corridor_Modeling\TIP_rdy.itl

2.) Into the following **Directory**:

“C:\NCDOT Training\Roadway\CM\Chapter 1 – Intro to Corridor Modeling”

*** Actual Project (R:Drive):** Copy **TIP_rdy.itl** into **R:\Roadway\CorridorModeling**

3.) Rename **TIP_rdy.itl** by adding your **TIP Project Number**:



E1.2 Create & Open Corridor Modeling Design File

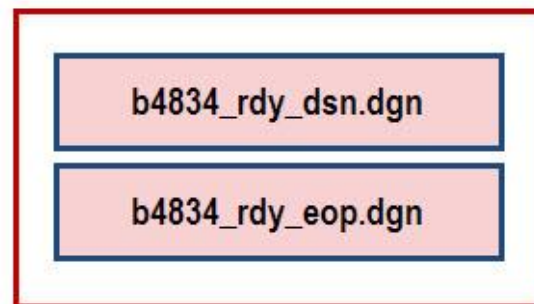
4.) Using “**Design File Generator**”, create a new **3D Corridor Modeling Design File**. Name this file “**b4834_rdy_cmd.dgn**”

(Saved in “**CorridorModeling**” folder).

5.) Open “**b4834_rdy_cmd.dgn**” file.

E1.3 Attach Project Related Reference Files

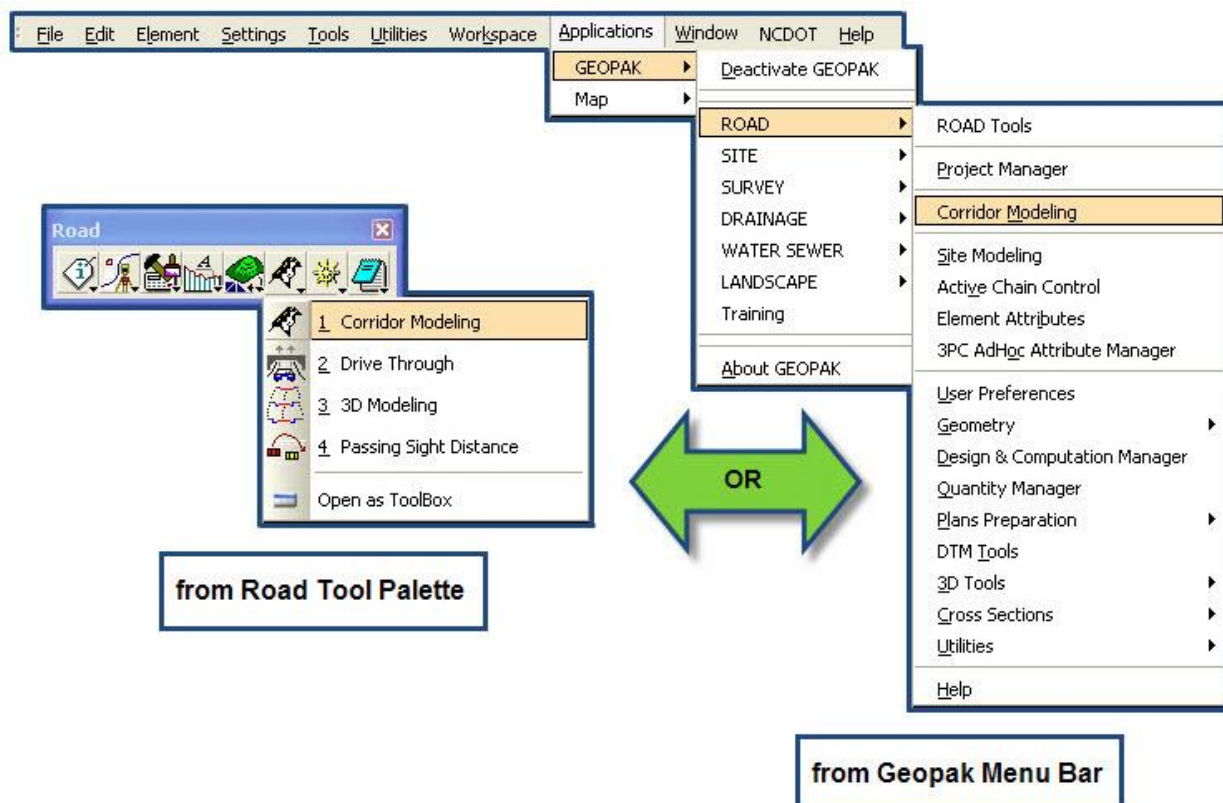
- 6.) Under References (File / References) attach the following files:



Files to be Referenced


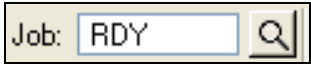
E1.4 Start Corridor Modeling

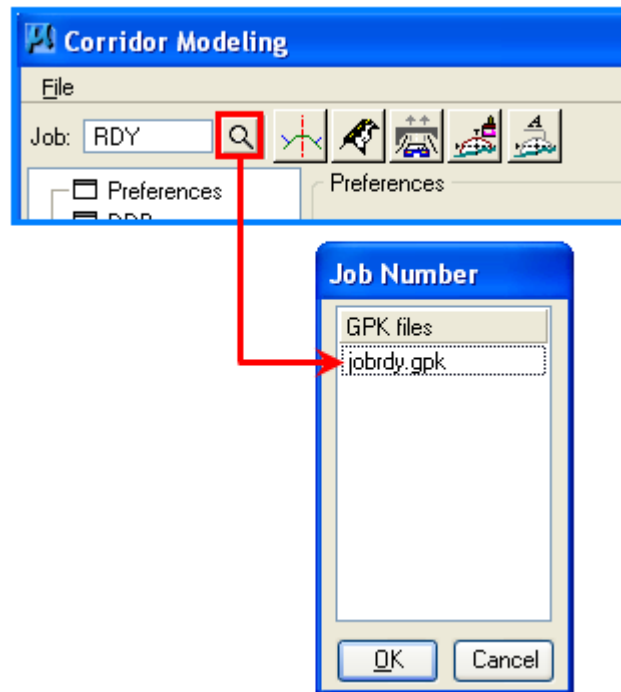
- 7.) "Corridor Modeling" can be opened in the two following ways:



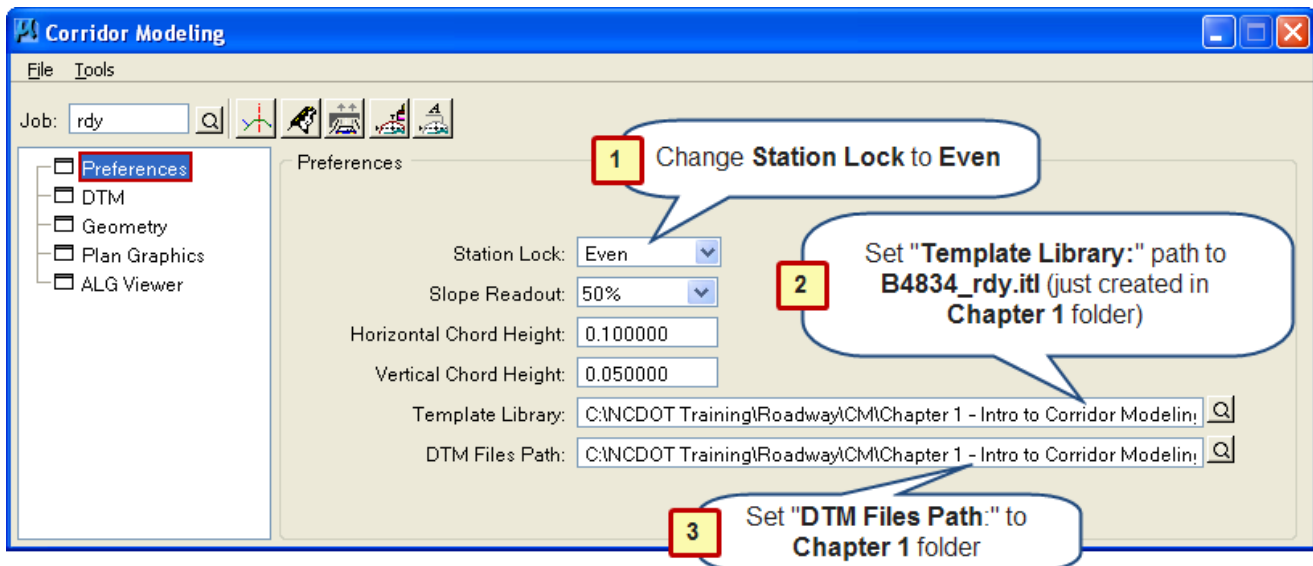
Exercise 2: Setting Up Corridor Modeling Preferences

E2.1 Geopak Job Number

- **Note:** Before getting started, use Geopak COGO Preferences to update “Job (GPK) Directory:”
- Under Corridor Modeling Dialog, select  next to . Choose project GPK file and select OK.



E2.2 Preferences



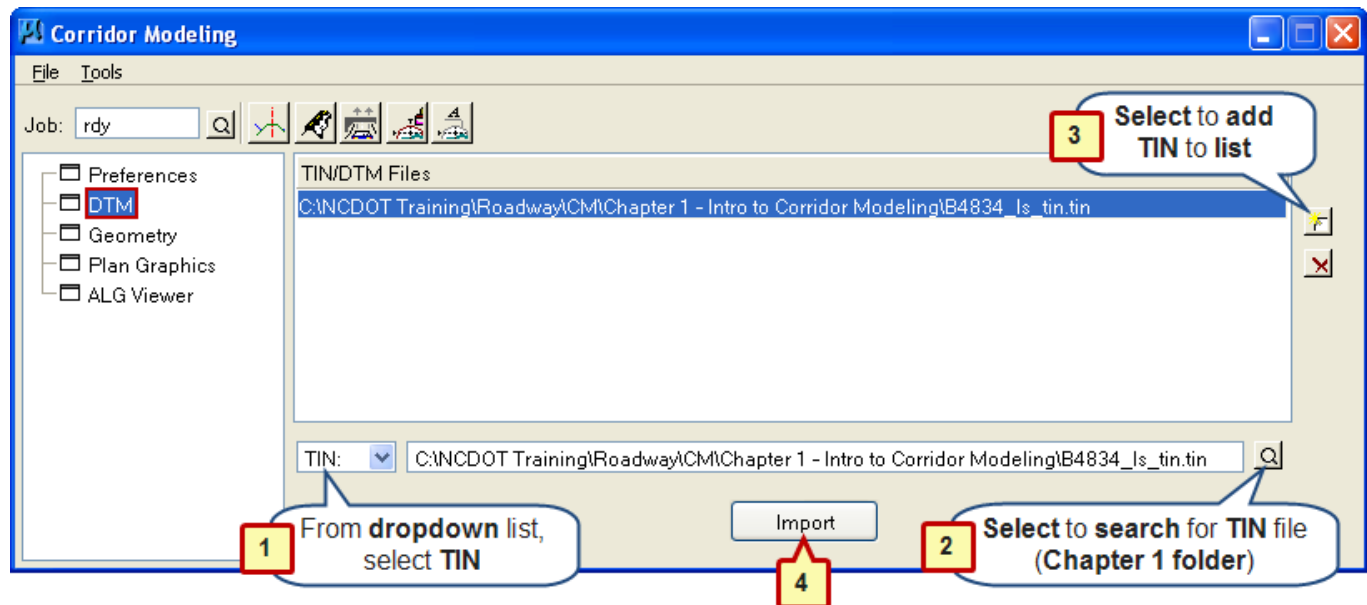
- Select and highlight **Preferences**.

- 1.)** Change **Station lock:** to **Even** (*This feature **controls cross section interval** in **Roadway Designer***)
- 2.)** **Template Library:** Set path to **Project ITL** just created in **Chapter 1** folder (**B4834_rdy.itl**).
- 3.)** **DTM Files Path:** Set path to "**Chapter 1**" folder.


*** Actual Project (R:Drive):**

Template Library / DTM Files Path should be set to: **CorridorModeling** folder

E2.3 DTM (Existing Ground DTM Conversion)



- Select and highlight **DTM** Section.

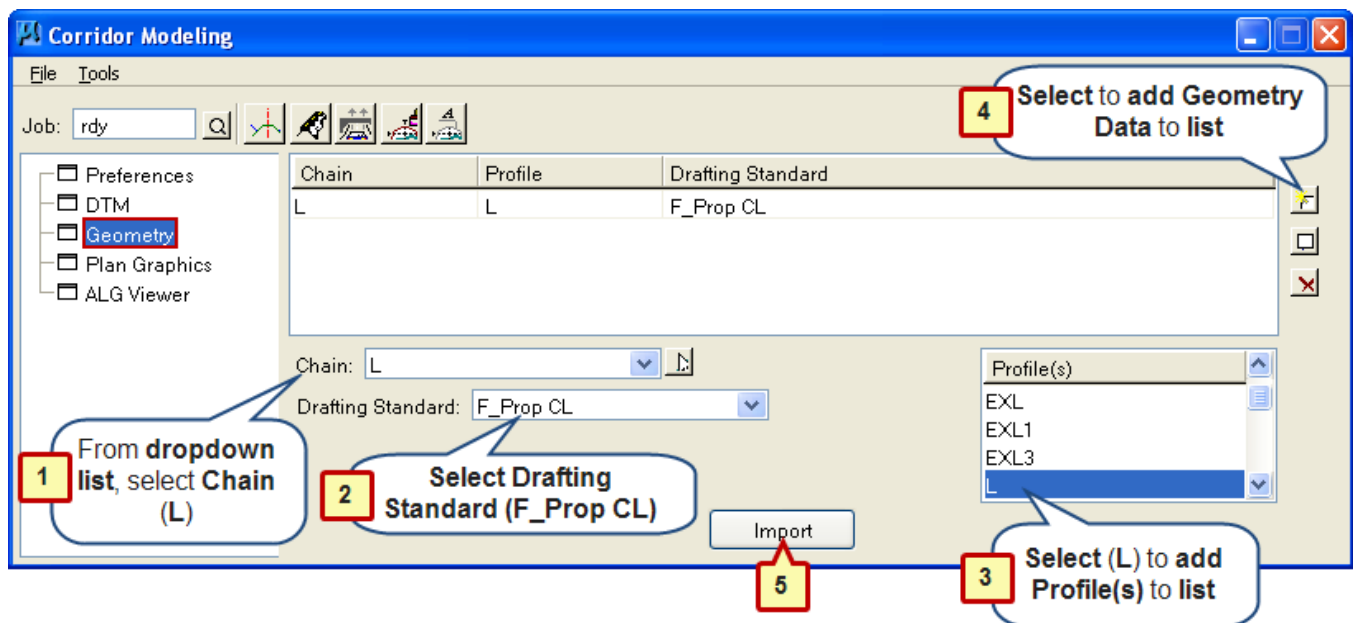
- 1.) In the dropdown list, select **TIN**.
- 2.) Select to search for (**B4834_Is_tin.tin**).
- 3.) Click  to add TIN to list.
- 4.) Select  to import **TIN** into **Corridor Modeling**. You should see an **Information** message stating that “**Tin file has been imported**”.

* **Actual Project (R:Drive):**

Step 2 / Search for TIN File: Path should be **set to DTM Folder**

Note: This process will also create an **InRoads DTM** file using the same name as the **Geopak TIN** file.

E2.4 Geometry (Conversion of GPK to ALG)



- Select and highlight **Geometry** Section.


- 1.) In the dropdown list, select **Chain (L)**.
- 2.) Next to **Drafting Standard:** dropdown, select "**F_Prop CL**".
- 3.) Under **Profile(s)** select **L**.

NOTE!: If no **Profiles** are listed, **re-select**  next to

Job:  . Choose **RDY** and select **OK**.

- 4.) Click  to add **Geometry Data** to list.

Note: Multiple "Profiles" can be added to list (such as Ditches, etc.)

- 5.) Select  to import **Geometry** into **Corridor Modeling**. You should see an **Information** message stating that "**Geometry has been imported**".

Note: This will also create a new **Corridor Modeling ALG** (stored in **RDDBS folder**).

E2.5 Plan Graphics (Importing into Corridor Modeling)

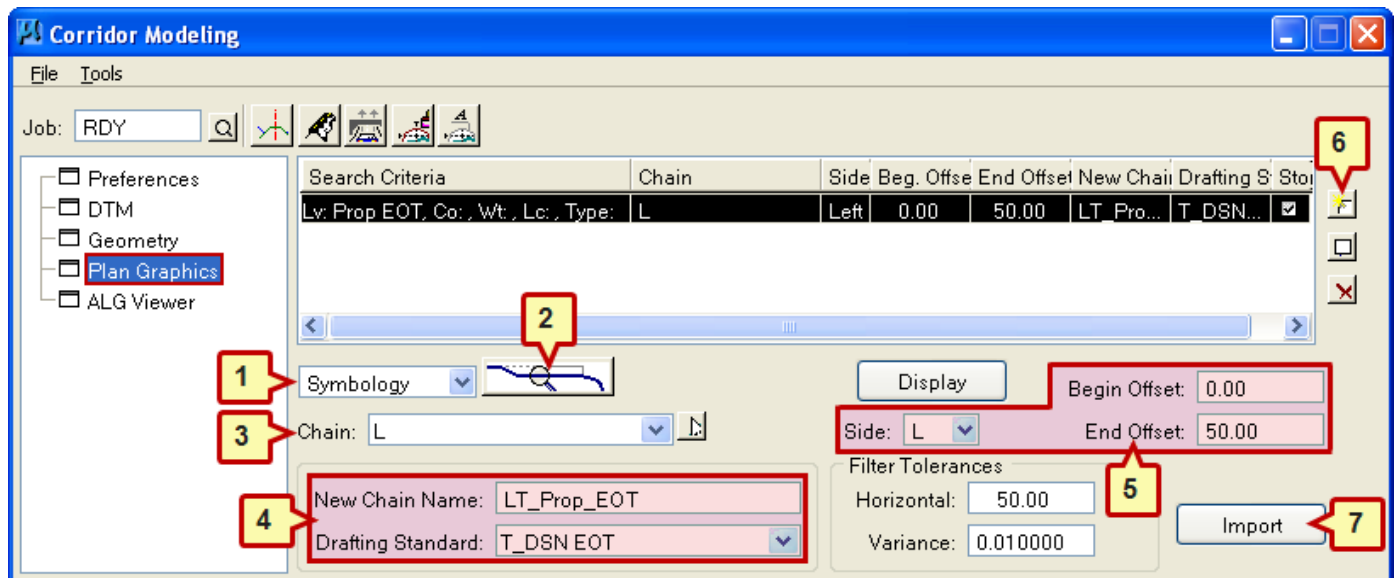
For this exercise we will be importing the following Plan Graphics (Left & Right Sides):

- Prop EOT
- Bridge
- Paved Shoulder
- Guardrail
- Exist EOP (EEOP)
- Shoulder Berm Gutter (SBG) – Left Side Only
- Shoulder Point


Common Problems to look for when Adding Plan Graphics

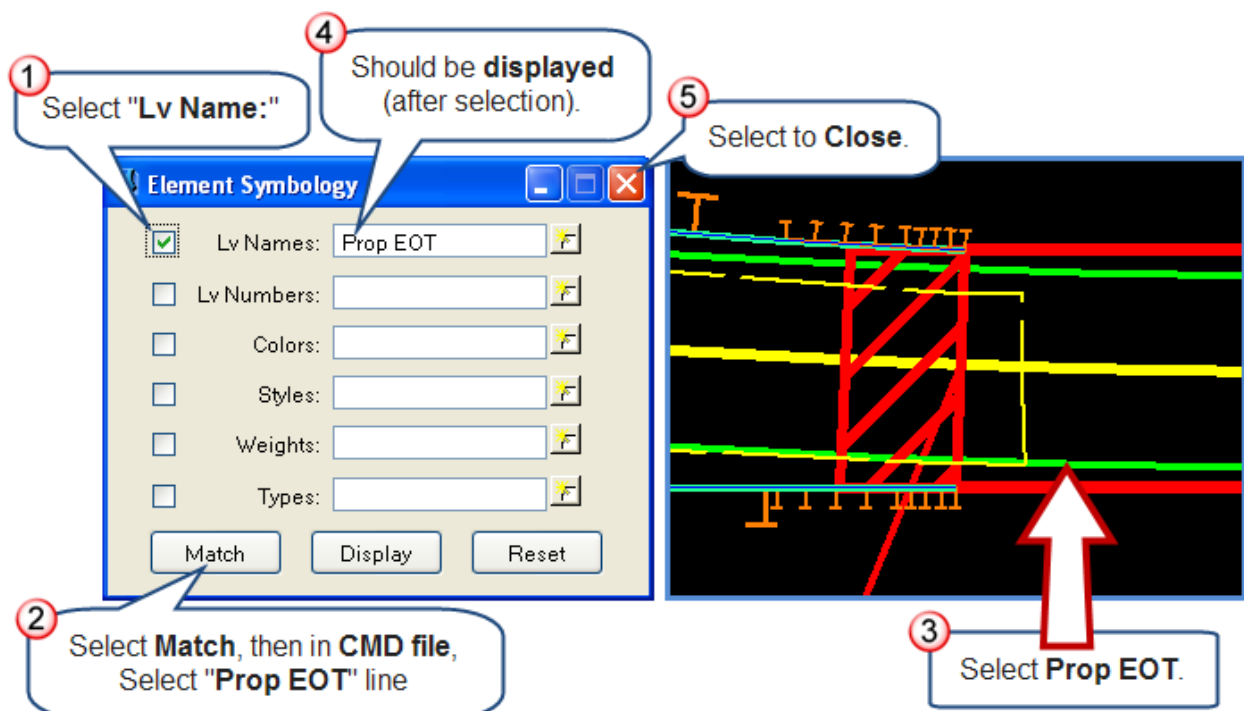
- If **two (or more) Plan Graphics are on top of one another, Corridor Modeling Templates will not be able to target properly** (such as **Guardrail, Guardrail Scratch Level and Paved Shoulder**).
- There could be times where **the location of Plan Graphics** (such as **Pavement Widths, Paved Shoulder Widths**) could **fall behind** the **“Pre-Set” widths that are set in the Default Templates**. This **will be covered** in the **“Display References Section (E4.6)”**.


How to Add Left Side "Proposed EOT" Plan Graphics




- Select and highlight **Plan Graphics** Section.

- 1.) In the dropdown list, select (**Symbology**).
- 2.) Select  (**Element Symbology**)



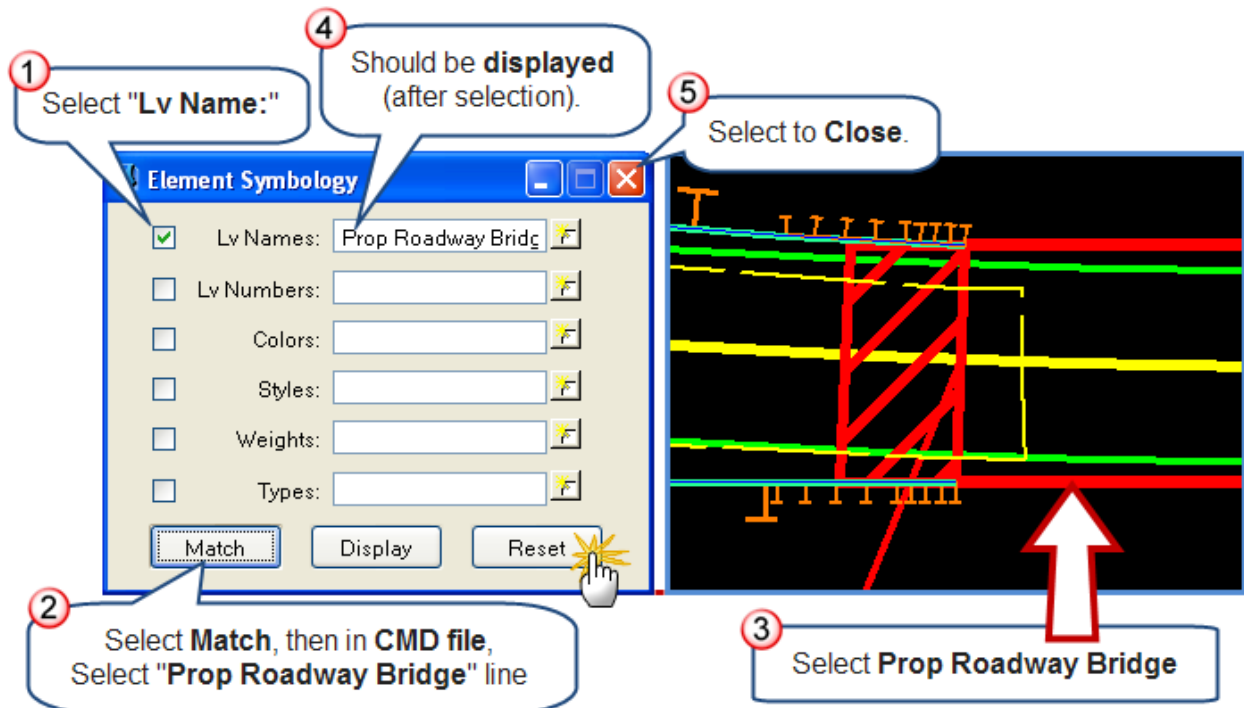
- 3.)** Next to **Chain:** dropdown, select **(L)**.
- 4.)** Next to **New Chain Name:** type in **(LT_Prop_EOT)**.
Select **Drafting Standard:** **(T_DSN EOT)**
- 5.)** Select **Side:** **(L)**
Type in **Begin Offset:** **(0.00)**
Type in **End Offset:** **(50.00)**
- 6.)** Click  to add **Plan Graphics** to list.

How to Add Right Side “Prop EOT” Plan Graphics

- 7.)** Next to **New Chain Name:** Change Name **(RT_Prop_EOT)**.
Keep same **Drafting Standard:** **(T_DSN EOT)**
- 8.)** Select **Side:** **(R)**
Type in **Begin Offset:** **(0.00)**
Type in **End Offset:** **(50.00)**
- 9.)** Click  to add **Plan Graphics** to list.

Add "Prop Roadway Bridge" Plan Graphics

***Note:** Click on "Reset" to clear out "Prop EOT" before selecting Match to add "Prop Roadway Bridge"

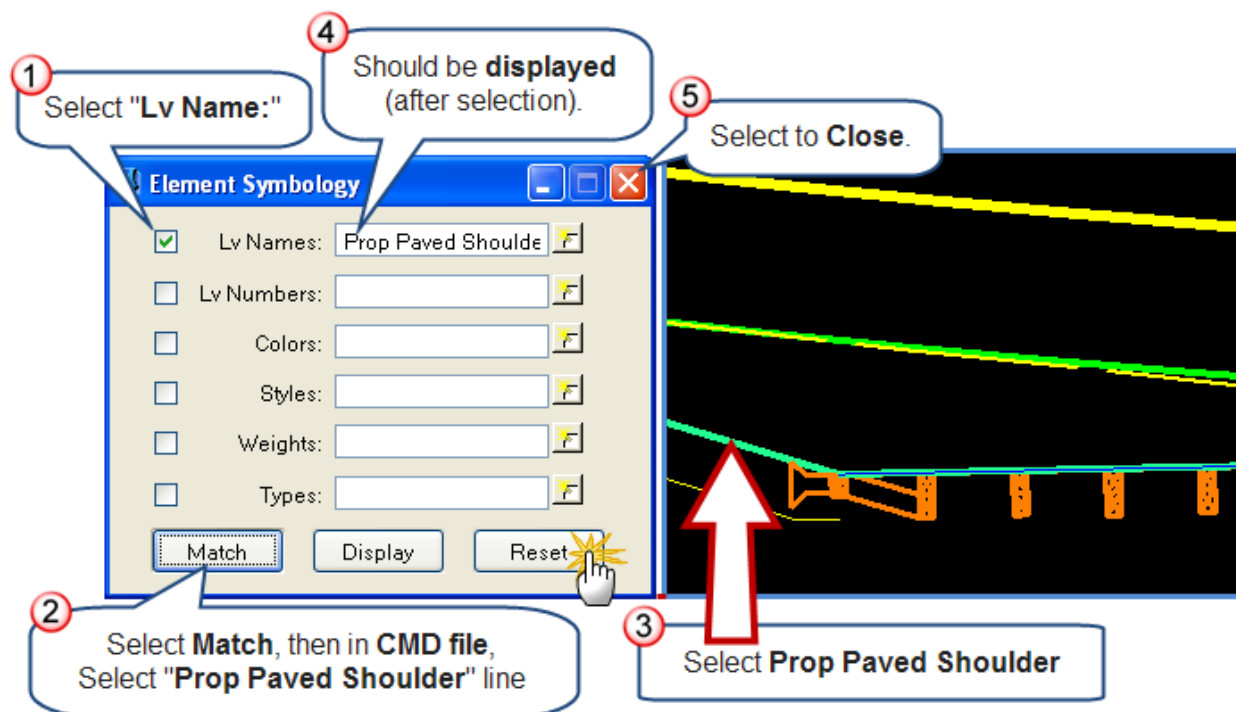


After selecting "Prop Roadway Bridge", fill in the following data:

	Chain	New Chain Name	Drafting Standard	Side	Offset		
					Begin	End	
Add First →	L	LT_Bridge	T_DSN Bridge	L	0	50	→ Add to List
Add Second →	L	RT_Bridge	T_DSN Bridge	R	0	50	→ Add to List

Add "Prop Paved Shoulder" Plan Graphics

***Note:** Click on "Reset" to clear out "Prop Roadway Bridge" before selecting Match to add "Prop Paved Shoulder"

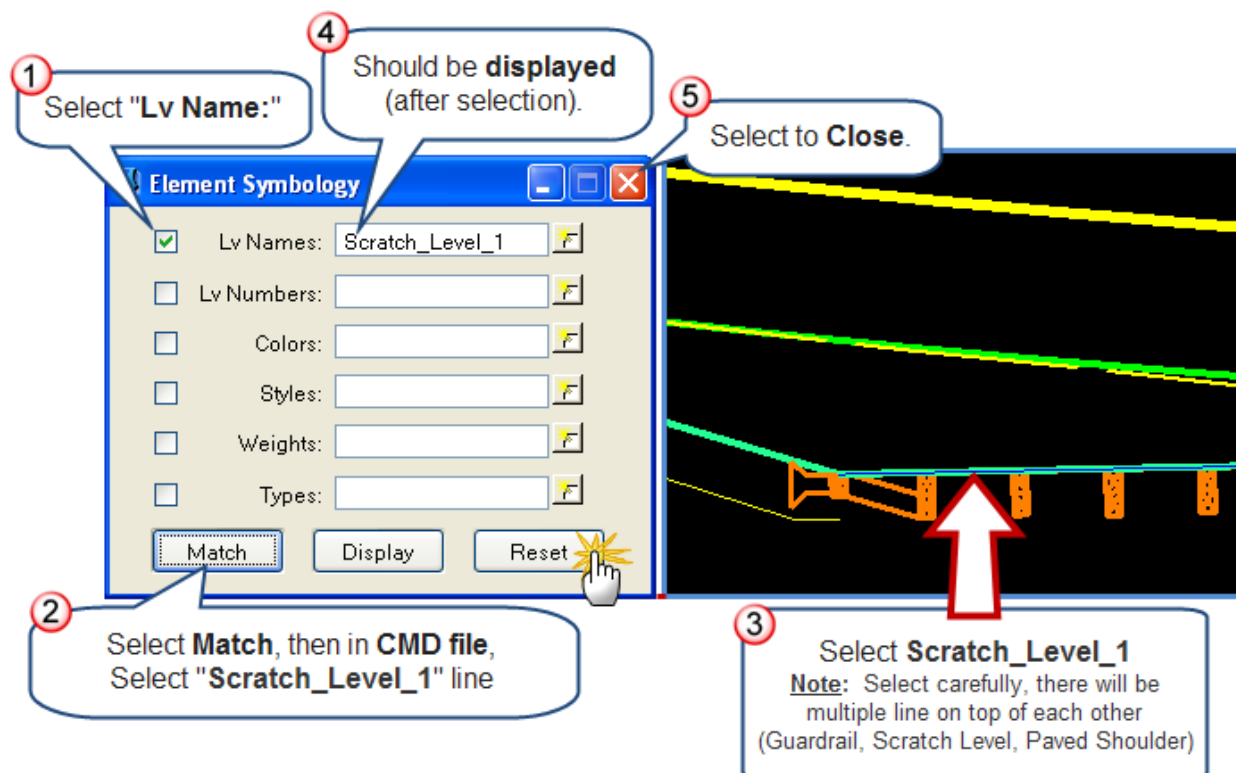


After selecting "Prop Roadway Bridge", fill in the following data:

	Chain	New Chain Name	Drafting Standard	Side	Offset		
					Begin	End	
Add First ➡	L	LT_Paved_Shld	T_DSN Paved Shld	L	0	50	➡ Add to List
Add Second ➡	L	RT_Paved_Shld	T_DSN Paved Shld	R	0	50	➡ Add to List

Add "Prop Guardrail" Plan Graphics

***Note:** Click on "Reset" to clear out "Prop Paved Shoulder" before selecting Match to add "Scratch_Level_1"



After selecting "Scratch_Level_1", fill in the following data:

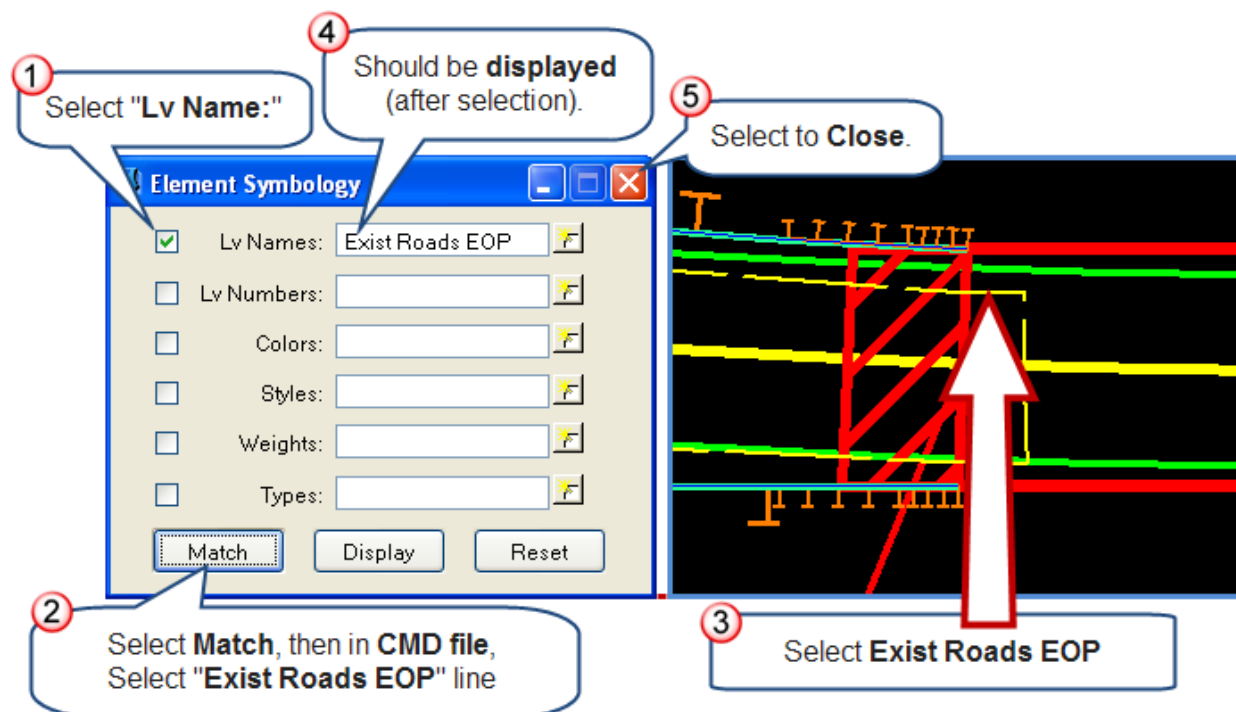
	Chain	New Chain Name	Drafting Standard	Side	Offset		
					Begin	End	
Add First ➡	L	LT_Guardrail	T_DSN Guardrail	L	0	50	➡ Add to List
Add Second ➡	L	RT_Guardrail	T_DSN Guardrail	R	0	50	➡ Add to List

Note: As an example, the New Chain Name for -Y- Lines could be named as:

LT_Y15_Guardrail

Add "Existing Edge of Pavement (EEOP)" Plan Graphics

***Note:** Click on "Reset" to clear out "Scratch_Level_1" before selecting Match to add "Exist Roads EOP"



After selecting "Exist Roads EOP", fill in the following data:

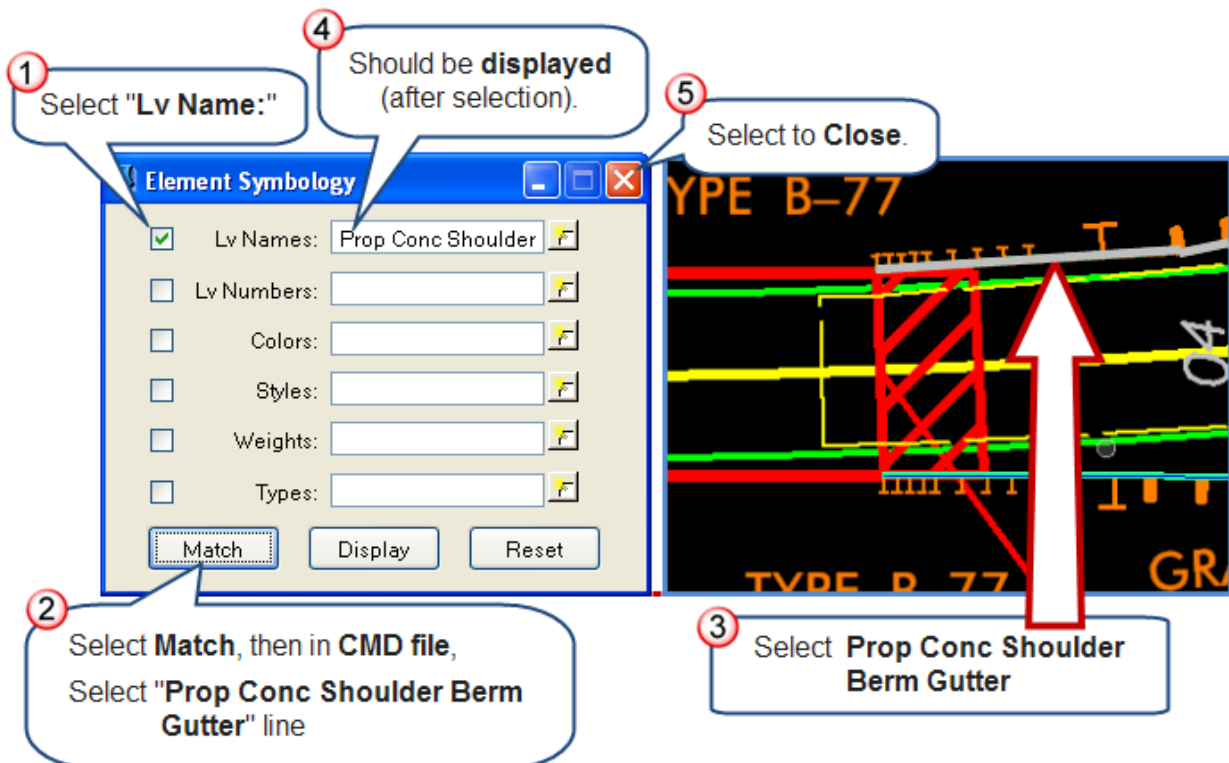
	Chain	New Chain Name	Drafting Standard	Side	Offset	
					Begin	End
Add First →	L	LT_OEEOP	T_PLN OEEOP	L	0	50
Add Second →	L	RT_OEEOP	T_PLN OEEOP	R	0	50

→ Add to List

→ Add to List

Add "Proposed Shoulder Berm Gutter (SBG)" Plan Graphics

***Note:** Click on "Reset" to clear out "Exist Roads EOP" before selecting Match to add "Prop Conc Shoulder Berm Gutter"



After selecting "Prop Conc Shoulder Berm Gutter SBG", fill in the following data:

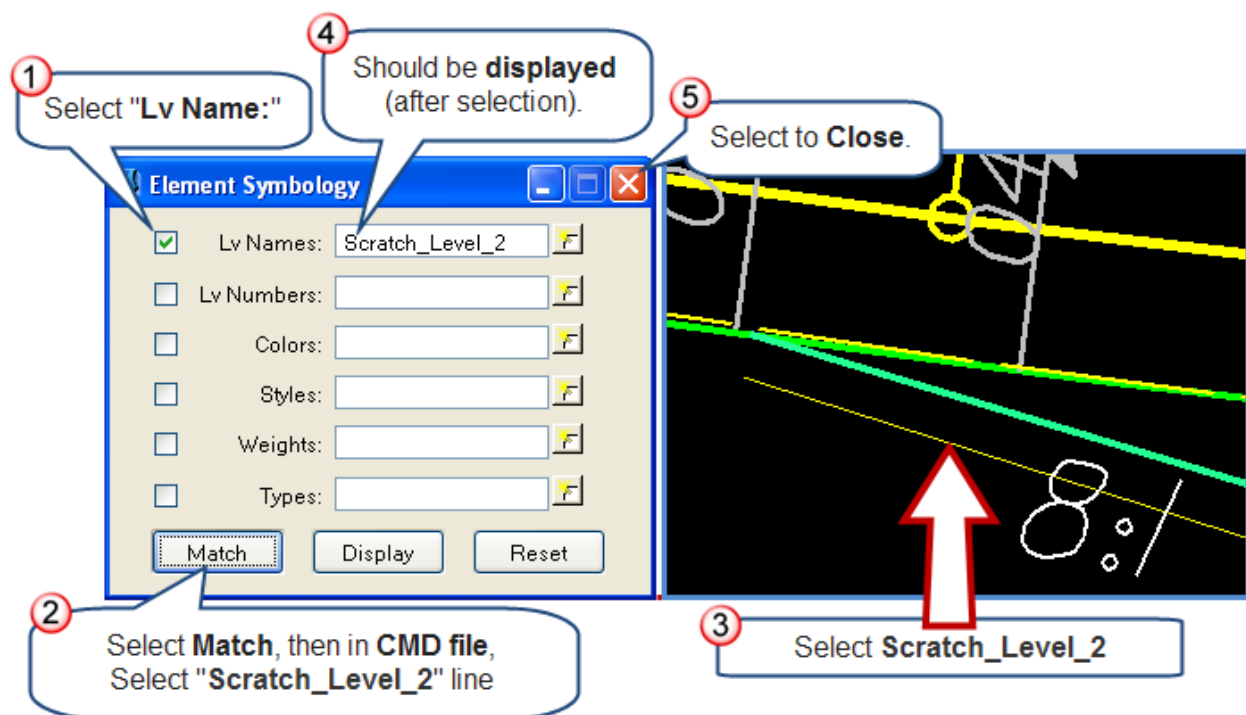
	Chain	New Chain Name	Drafting Standard	Side	Offset	
					Begin	End
Add ➔	L	LT_SBG	T_DSN SBG	L	0	50

➔ Add to List

*** Note:** Only "Left Side SBG" needs to be added.

Add "Shoulder Point" Plan Graphics

***Note:** Click on "Reset" to clear out "Prop SBG" before selecting Match to add "Scratch_Level_2"



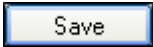
After selecting "Scratch_Level_2", fill in the following data:

	Chain	New Chain Name	Drafting Standard	Side	Offset		
					Begin	End	
Add First →	L	LT_Shld_Pnt	T_DSN Shld Pnt	L	0	50	→ Add to List
Add Second →	L	RT_Shld_Pnt	T_DSN Shld Pnt	R	0	50	→ Add to List

Importing Plan Graphics

- All of **Plan Graphics** necessary for Roadway Designer should now be added.
- Click on "**Import**" to **import Plan Graphics**.
- You should see an **Information Message** stating that "13 Chain(s) successfully stored".

E2.6 Saving Roadway Designer Preference File (RDP)

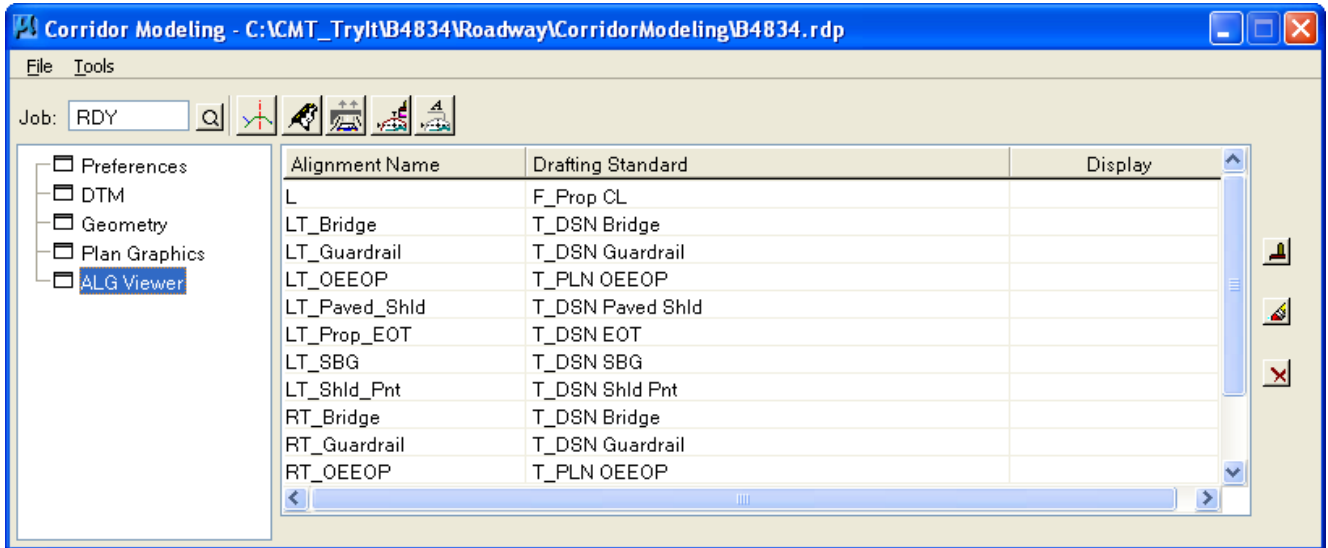
- 1.) Under **Corridor Modeling Dialog - File Dropdown Menu**, select **Save As**.
- 2.) Next to **Save in: Select path** to "**Chapter 1**" folder.
- 3.) Next to **File name:** Type in **B4834.rdp**
- 4.) Click on , to Save **RDP** File.
- 5.) You should see an **Information Message** stating that:

"C:\NCDOT Training\Roadway\CM\Chapter 1 – Intro to Corridor Modeling"\B4834.rdp Saved"

*** Actual Project (R:Drive):**

RDP File should be saved to: **CorridorModeling** folder

E2.7 ALG Viewer



- The ALG Viewer accesses and manipulates data directly within the ALG file.
- Allows the designer to delete alignments from the ALG.
- Allows the designer to visualize alignments for review.

Click on the ALG Tab to list the alignments in the ALG file. For each alignment displayed, the associated drafting standard and display status are shown. The user can select single or multiple alignments.



Click to **Display** all selected alignments



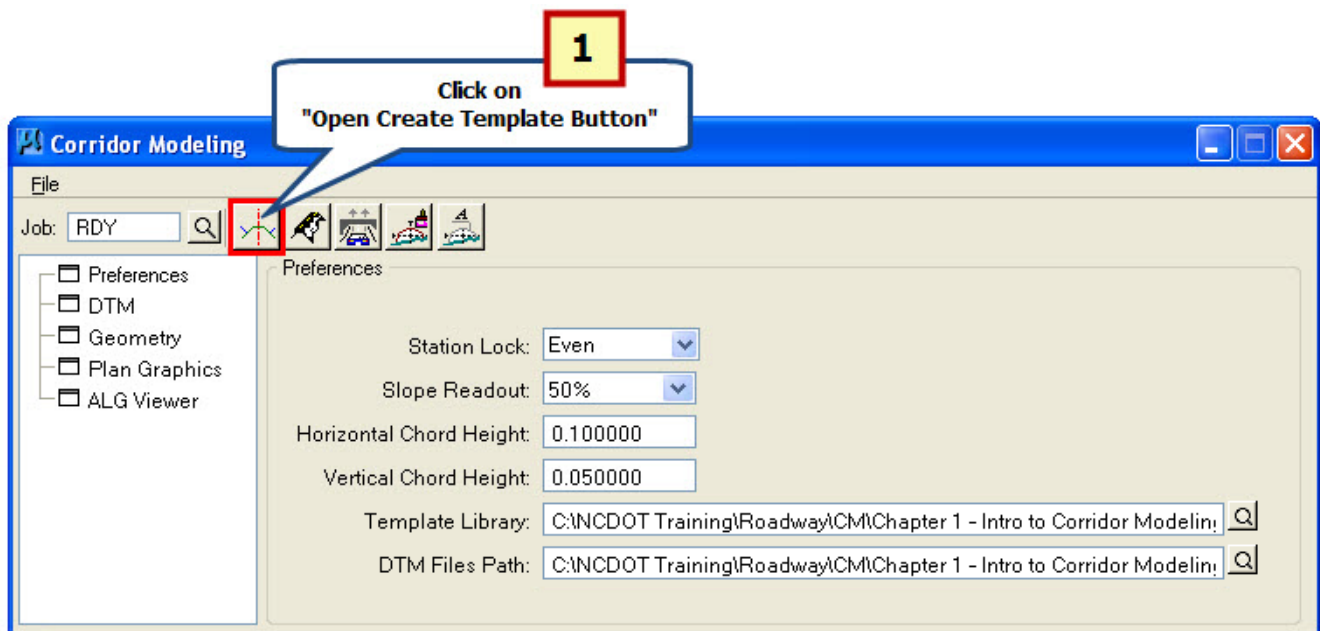
Click to **Undisplay** all selected alignments



Click to **Delete** all selected alignments from ALG file. As alignments are deleted from the ALG file, the software synchronizes the Geometry and Plan graphics portions of Corridor Modeling.

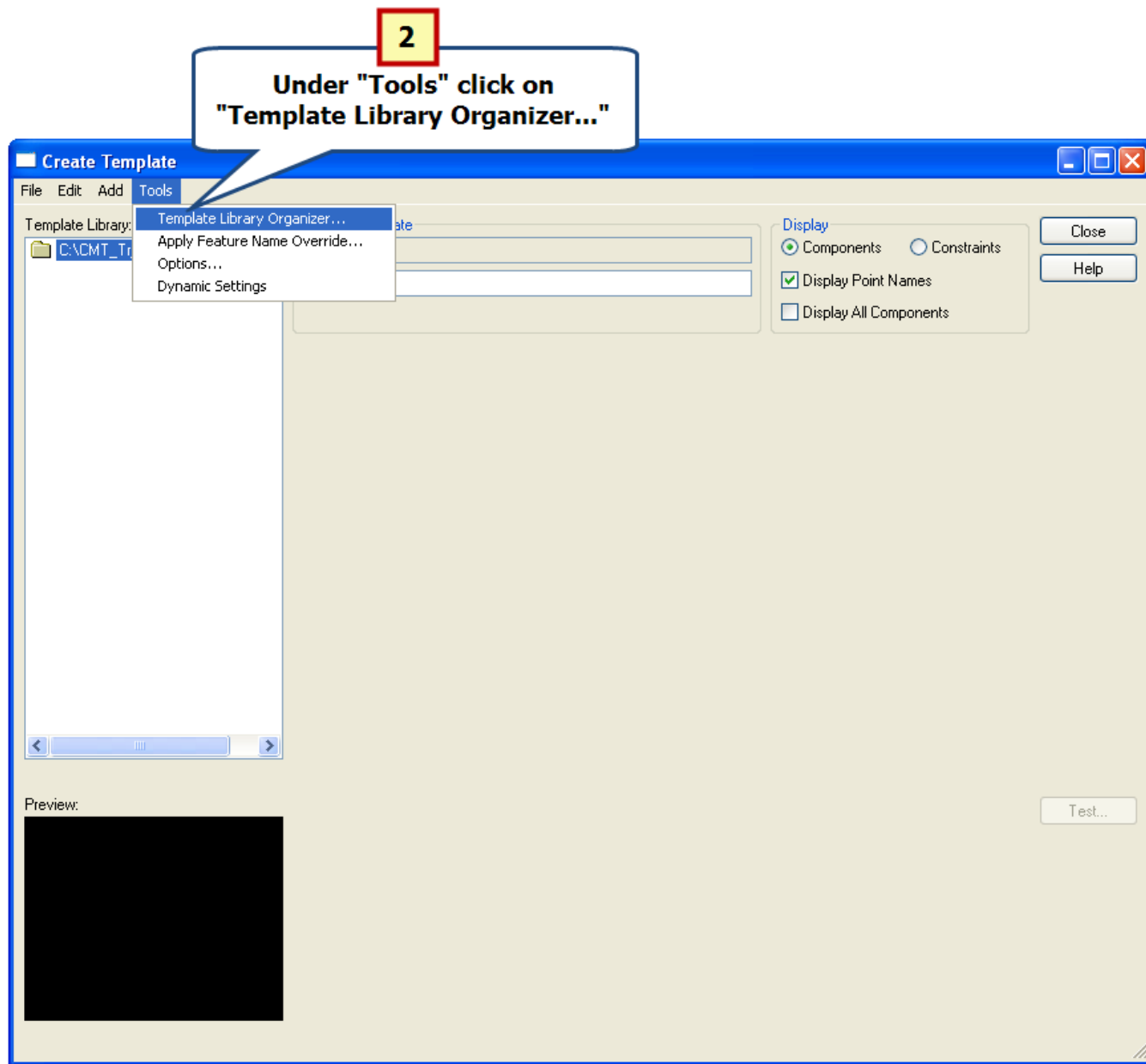
Exercise 3: Create Template Dialog Window

E3.1 How to Start "Open Create Template"



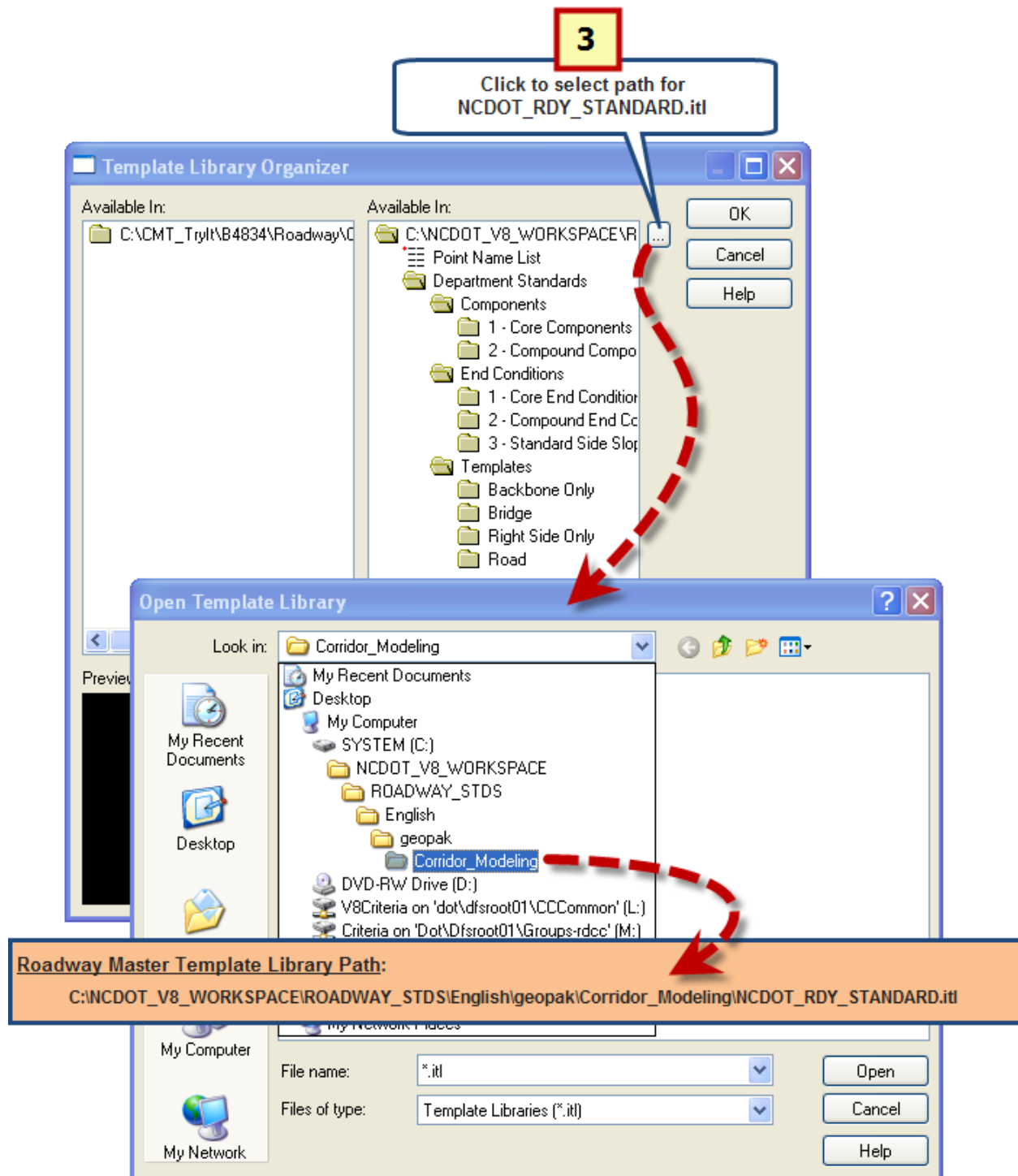
- 1.) Under "Corridor Modeling Dialog Window" click on  "Open Create Template Button".

E3.2 Copying Standard Templates with "Template Library Organizer..."



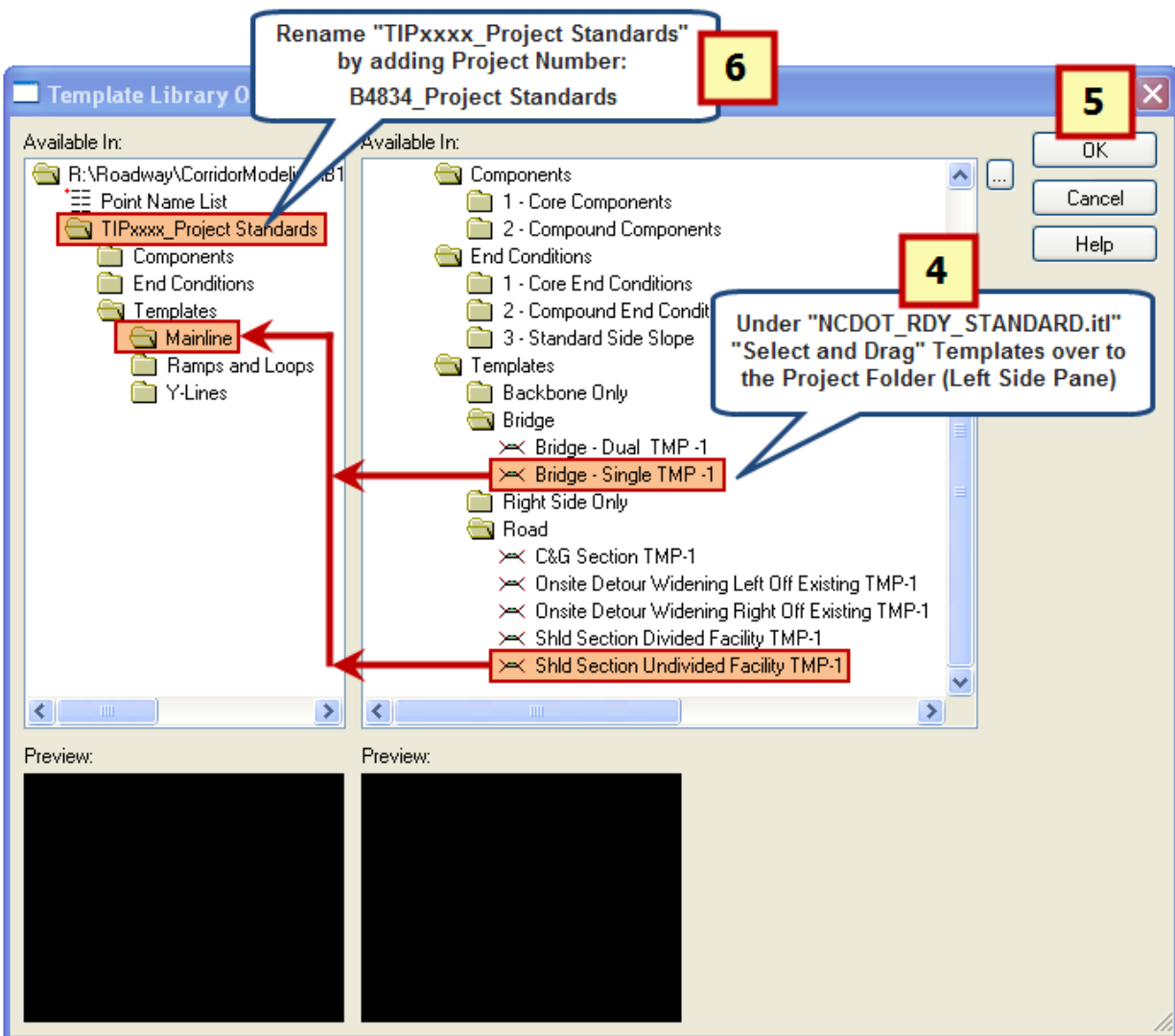
- 2.) Under "Create Template" select "Tools" then "Template Library Organizer..."

E3.3 Set Path to Access NCDOT_RDY_STANDARD Library (ITL)



- 3.)** In right window of "Template Library Organizer" click on  to set path for Master Template Library.

E3.4 Select and Drag Templates into "Project Specific Library (B4834_rdy.itl)"



4.) Under "NCDOT_RDY_STANDARD.itl" select and drag "Bridge – Single TMP-1" and "Shld Section Undivided Facility TMP-1" over to Mainline Folder under B4834_rdy.itl Template Library.

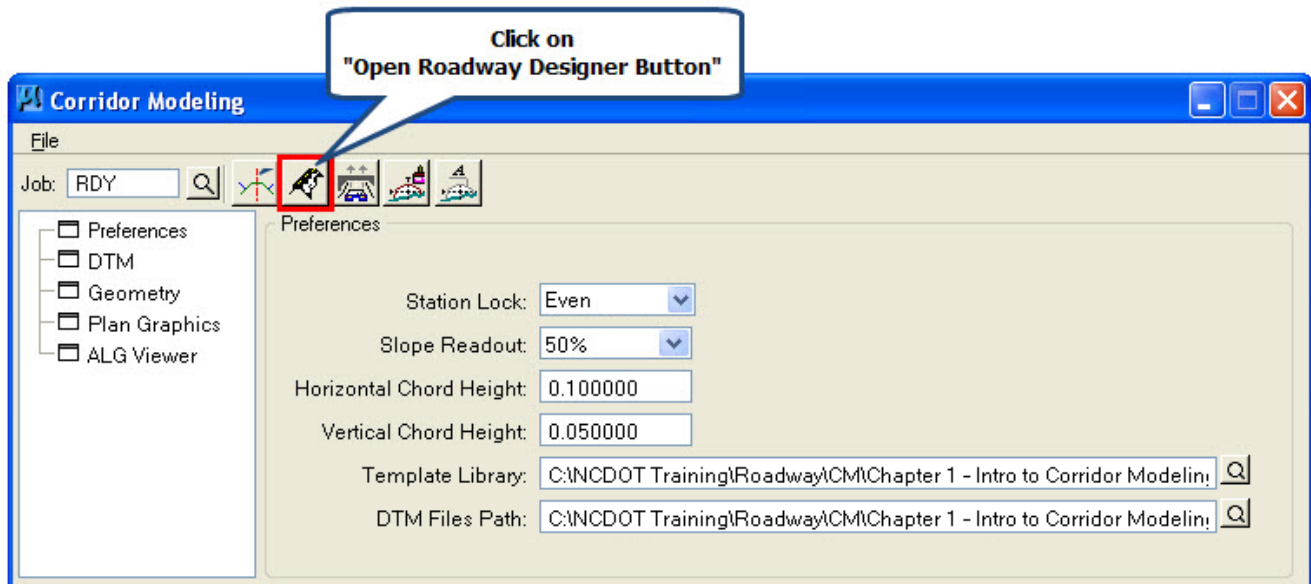
5.) Select .

6.) Rename "TIPxxxx_Project Standards" by adding Project Number:

B4834_Project Standards

Exercise 4: Roadway Designer

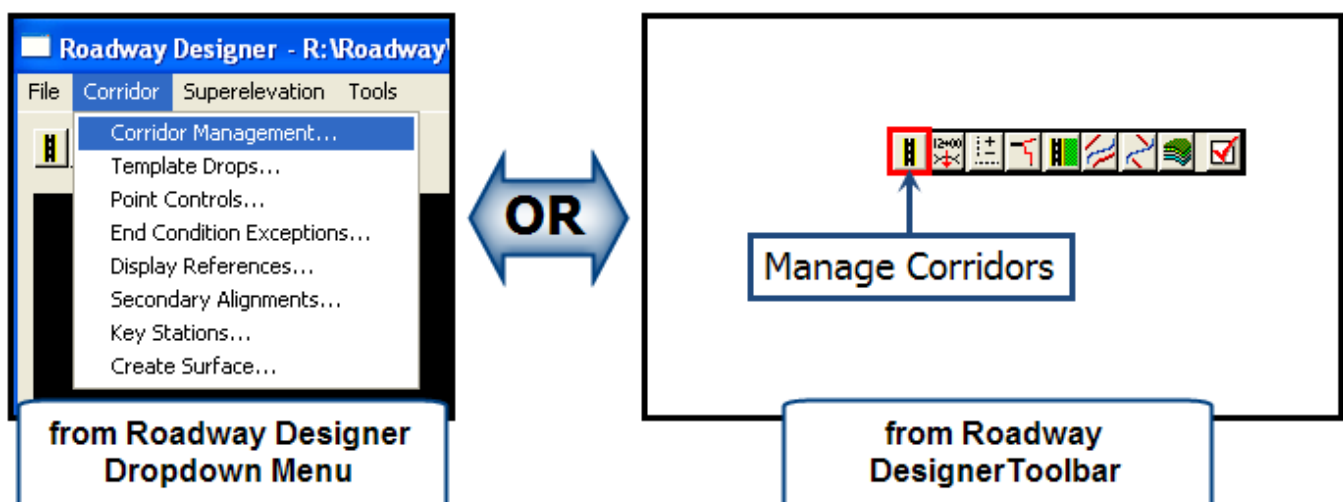
E4.1 How to Start "Roadway Designer"

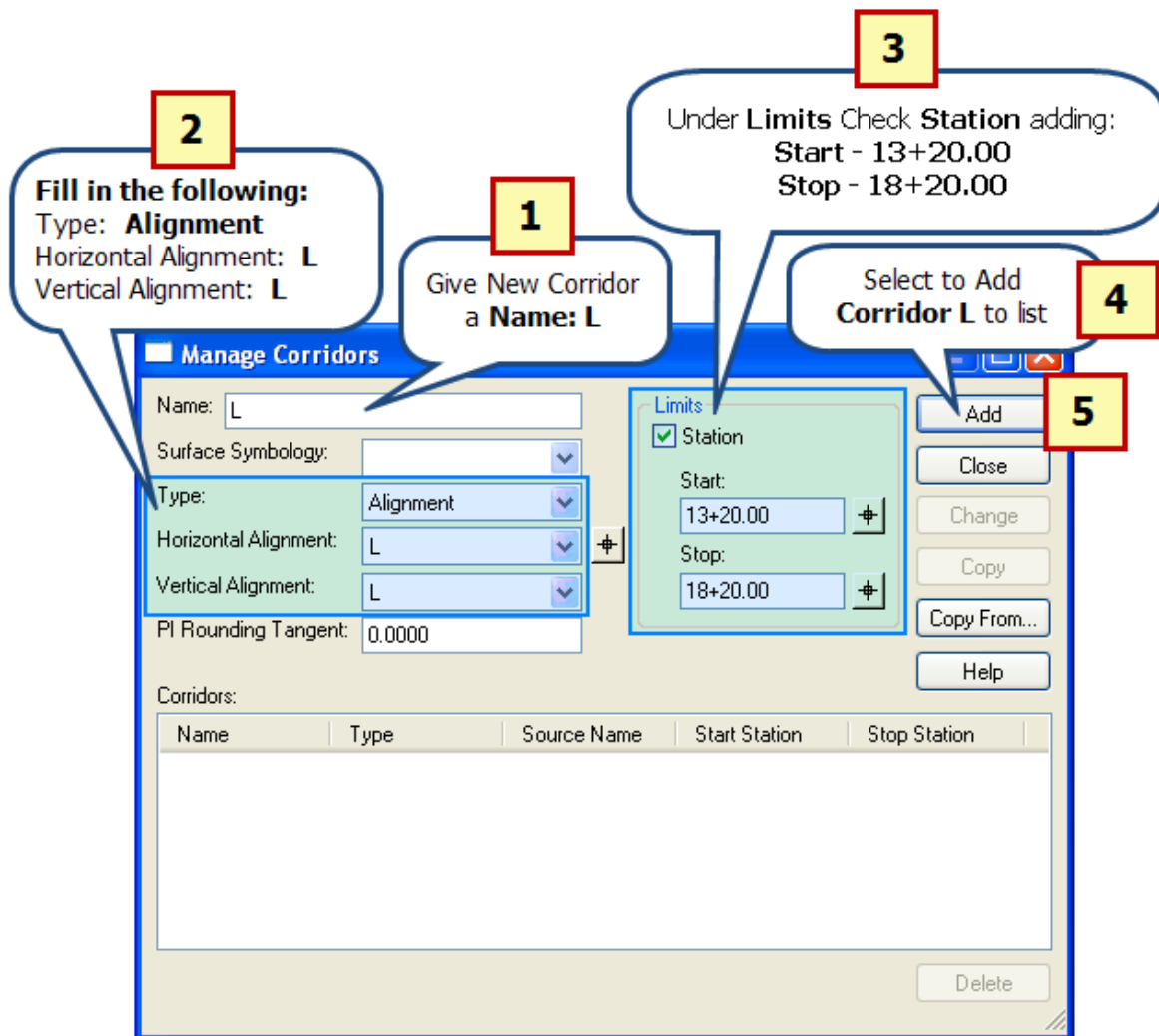


- Under "Corridor Modeling Dialog Window" click on  "Open Roadway Designer Button".

E4.2 Open "Manage Corridors"

- By using the **Corridor Dropdown Menu** or by using the **Roadway Designer Toolbar**:

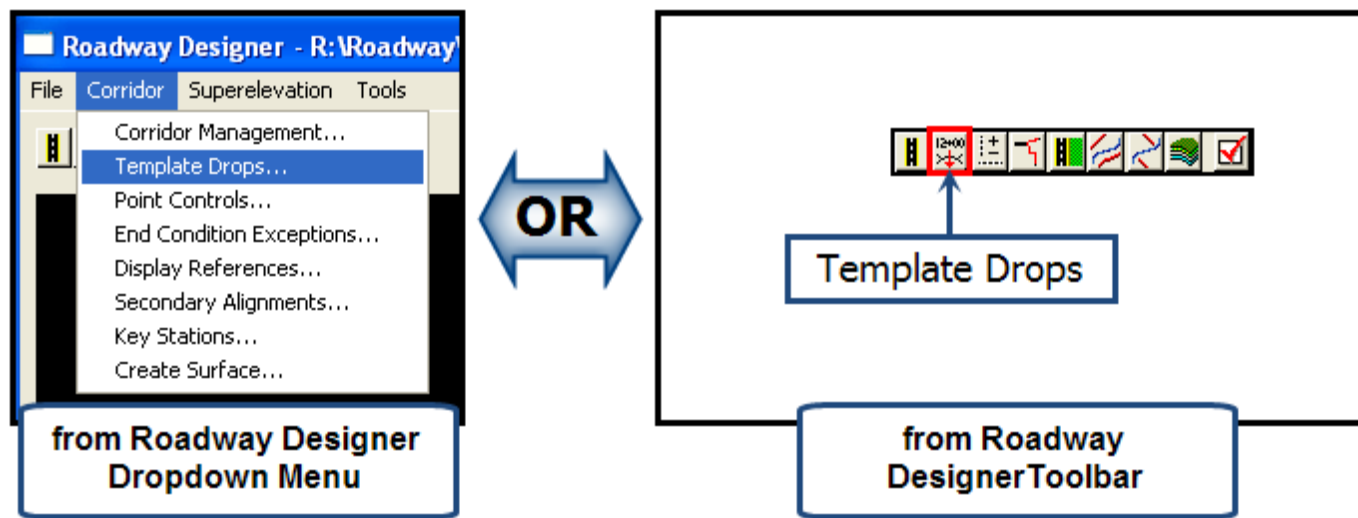




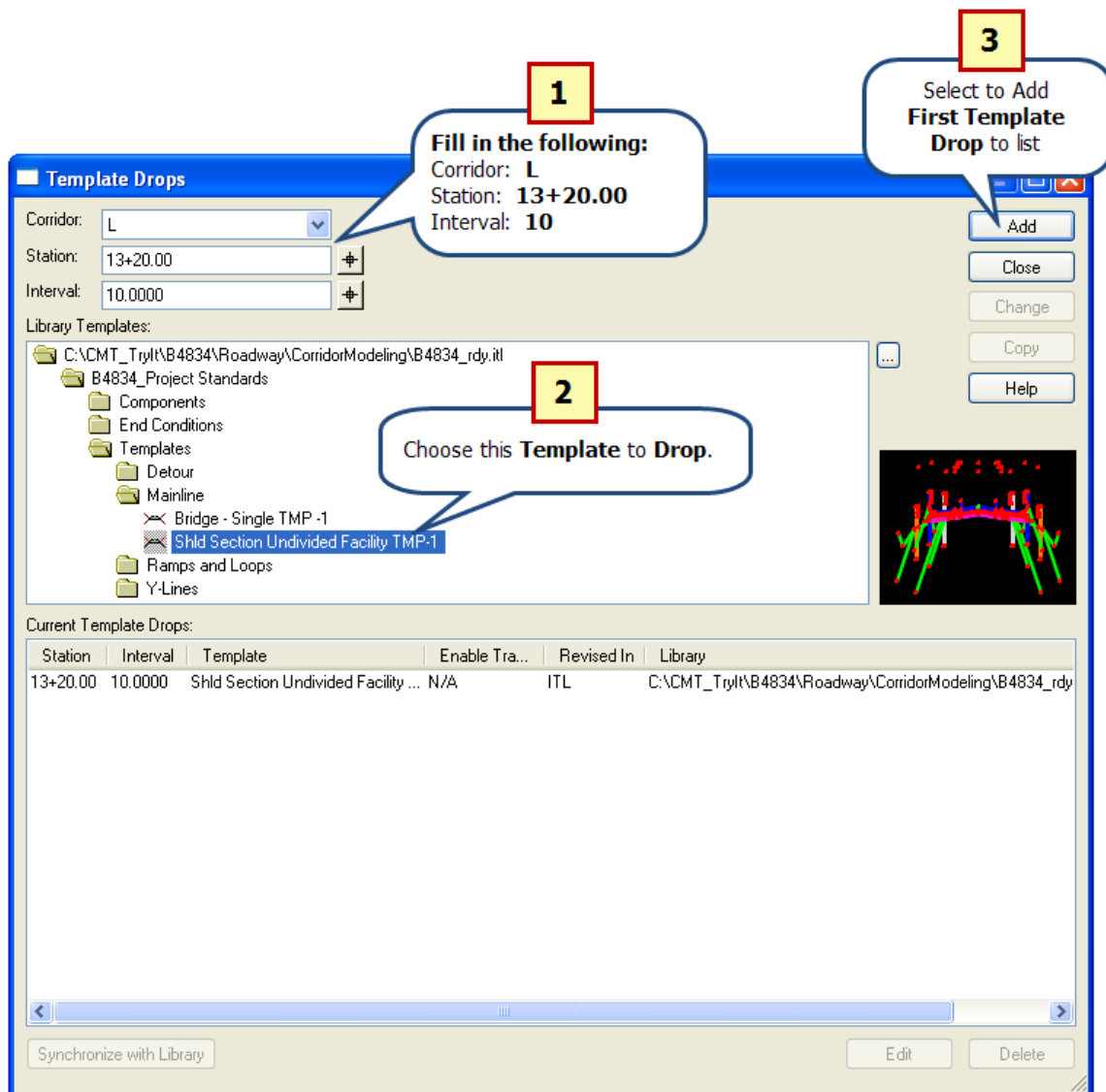
- 1.)** Next to **Name:** Type **L**
- 2.)** Next to **Type:** Choose **Alignment**
Next to **Horizontal Alignment:** Choose **L**
Next to **Vertical Alignment:** Choose **L**
- 3.)** Under "**Limits**" select ☒ next to **Station**
Next to **Start:** type **13+20.00**
Next to **Stop:** type **18+20.00**
- 4.)** Click to add **Corridor L** to list.
- 5.)** Select to **Close Manage Corridors Dialog Window.**


E4.3 Open "Template Drops"

- By using the **Corridor Dropdown Menu** or by using the **Roadway Designer Toolbar**:




Add First "Template Drop" at Station 13+20.00




- 1.) Next to **Corridor:** Choose **L**
Next to **Station:** Type **13+20.00**
Next to **Interval:** Type **10**
- 2.) Under "**Library Templates**" select **Template** (under **Mainline**)
Choose: **Shld Section Undivided Facility TMP-1**
- 3.) Click  to add **First Template Drop** to list.
- 4.) **Repeat this process** for **adding additional Template Drops** (shown on next page).

Repeating Previous "Template Drop" process, Add the following Template Drops:

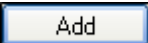
2nd "Template Drop": Corridor: **L**
Station: **15+46.99**
Interval: **10**
Choose: **Shld Section Undivided Facility TMP-1**

Click  to add 2nd Template Drop


3rd "Template Drop": Corridor: **L**
Station: **15+47 (Begin Bridge)**
Interval: **10**
Choose: **Bridge – Single TMP-1**

Click  to add 3rd Template Drop

4th "Template Drop": Corridor: **L**
Station: **16+36 (End Bridge)**
Interval: **10**
Choose: **Bridge – Single TMP-1**

Click  to add 4th Template Drop

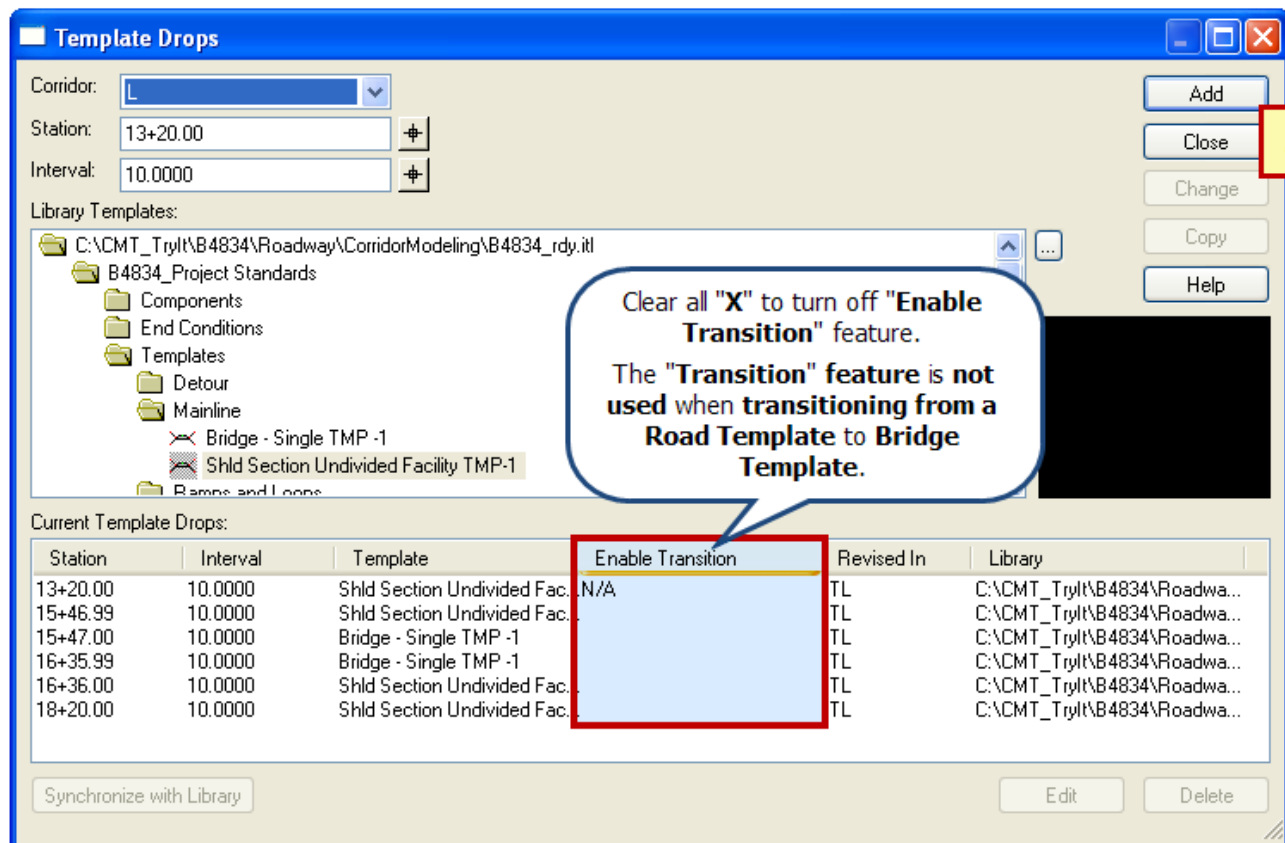
5th "Template Drop": Corridor: **L**
Station: **16+36.01**
Interval: **10**
Choose: **Shld Section Undivided Facility TMP-1**

Click  to add 5th Template Drop

Final "Template Drop": Corridor: **L**
Station: **18+20**
Interval: **10**
Choose: **Shld Section Undivided Facility TMP-1**

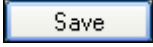
Click  to add Final Template Drop

After Adding All Template Drops the "Template Drop Dialog" should look like the following:



5.) Once all Template Drops have been added, select **Close** to **Close Template Drops Dialog Window**.

E4.4 Save IRD File

- 1.) Under File Dropdown Menu, select **Save**.
- 2.) Next to **Save: Select path** to "Chapter 1" folder.
- 3.) Next to **File name:** Type in **B4834.ird**.
- 4.) Click on , to Save IRD File.

* Actual Project (R:Drive):

IRD File should be saved to : **CorridorModeling** folder

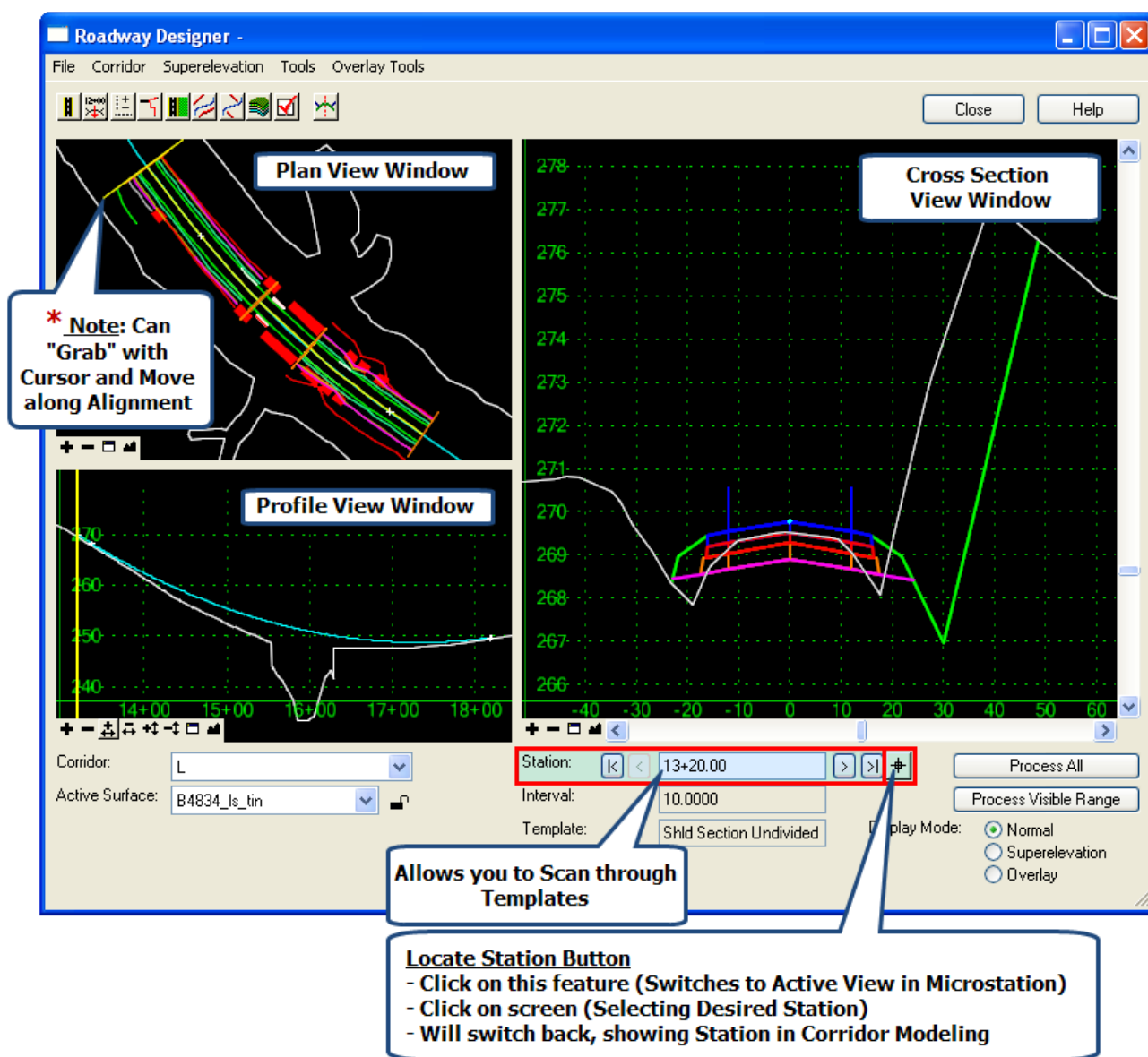
Note:

- For **Bridge Projects** save IRD using **Project Number**.
- For **larger projects (with multiple alignments)** you will need to **save a IRD for each alignment (example: L.ird, Y1.ird)**

E4.5 Using “Plan, Profile and Cross Section Views” in Roadway Designer Dialog Window

- After adding all Template Drops the user should scan through the cross sections to check for errors.
- Using “Display References...” (under “Corridor Dropdown Menu”) allows the user to show (in Cross Section View) Plan Graphics (shown as vertical lines).

Roadway Designer Dialog Window:



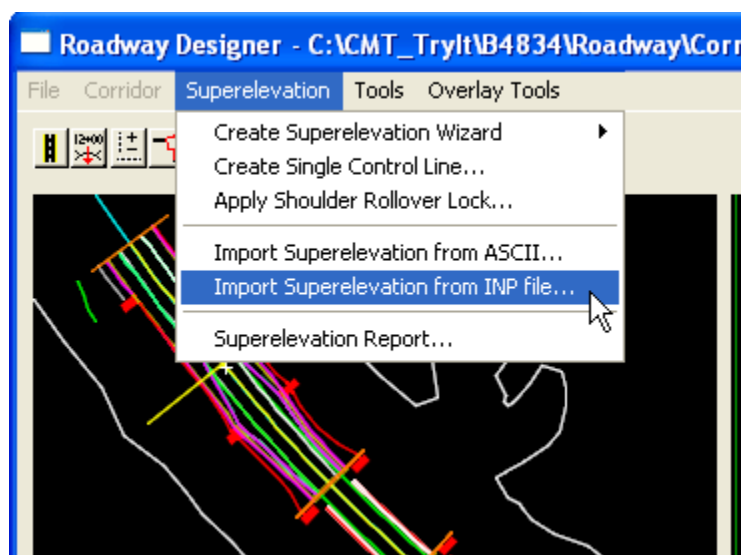
E4.6 Superelevation

- Superelevation is created and applied using the Roadway Designer after the corridor is created and template drops are assigned.
- Superelevation is stored and saved in the Roadway Design File (IRD) and is applied to a corridor.

*** Important:** It has been determined that “**Import Superelevation from INP...**” will **work best** for **Roadway Design’s workflow** and **should be the Primary Method** for applying Superelevation in Corridor Modeling.

How to “Import Superelevation from INP file...”

- By using the Tools Dropdown Menu:



How to "Import Superelevation from INP file..."

1 Type in **Name of Selection: L**

2 Click to **Select Path of .INP File**

3 Using **Dropdown** dialog, **Select Point: LT_PV1_OEOT**
Sets the **Left Side OEOT (Outside Edge of Travel) Point**

4 Using **Dropdown** dialog, **Select Point: RT_PV1_OEOT**
Sets the **Right Side OEOT (Outside Edge of Travel) Point**

5 Click on **Apply**

6 Click **Cancel** to Close "Import Superelevation from .INP file"

Import Superelevation from .INP file

Section: L

File: C:\NCDOT Training\Roadway\CM\Chapter 1 - Intro to ...

Point	Offset	Pivot Point	Station	Cross Slope
LT_PV1_OEOT	-10.0000	PV1_PGL	13+20.00	-2.00%
	10.0000	PV1_PGL	13+20.00	-2.00%

LT_BR_04
LT_BR_05
LT_BR_01
LT_BR_02
LT_BR_03
LT_BR_06
LT_CG_2xPVSlope_Null
LT_CG_Bot_Null
LT_CG_MatchPVSlope
LT_CG_VCeiling_Null
LT_CG_VFloor_Null
LT_PV1_OEOT
LT_Seek_OEEOP_Null
LT_UC_Switch
PV1_PGL
RT_BR_04
RT_BR_05
RT_BR_01
RT_BR_02
RT_BR_03
RT_BR_06
RT_CG_2xPVSlope_Null
RT_CG_Bot_Null
RT_CG_MatchPVSlope
RT_CG_VCeiling_Null
RT_CG_VFloor_Null
RT_PV1_OEOT
RT_Seek_OEEOP_Null
RT_UC_Switch

Import Superelevation from .INP file

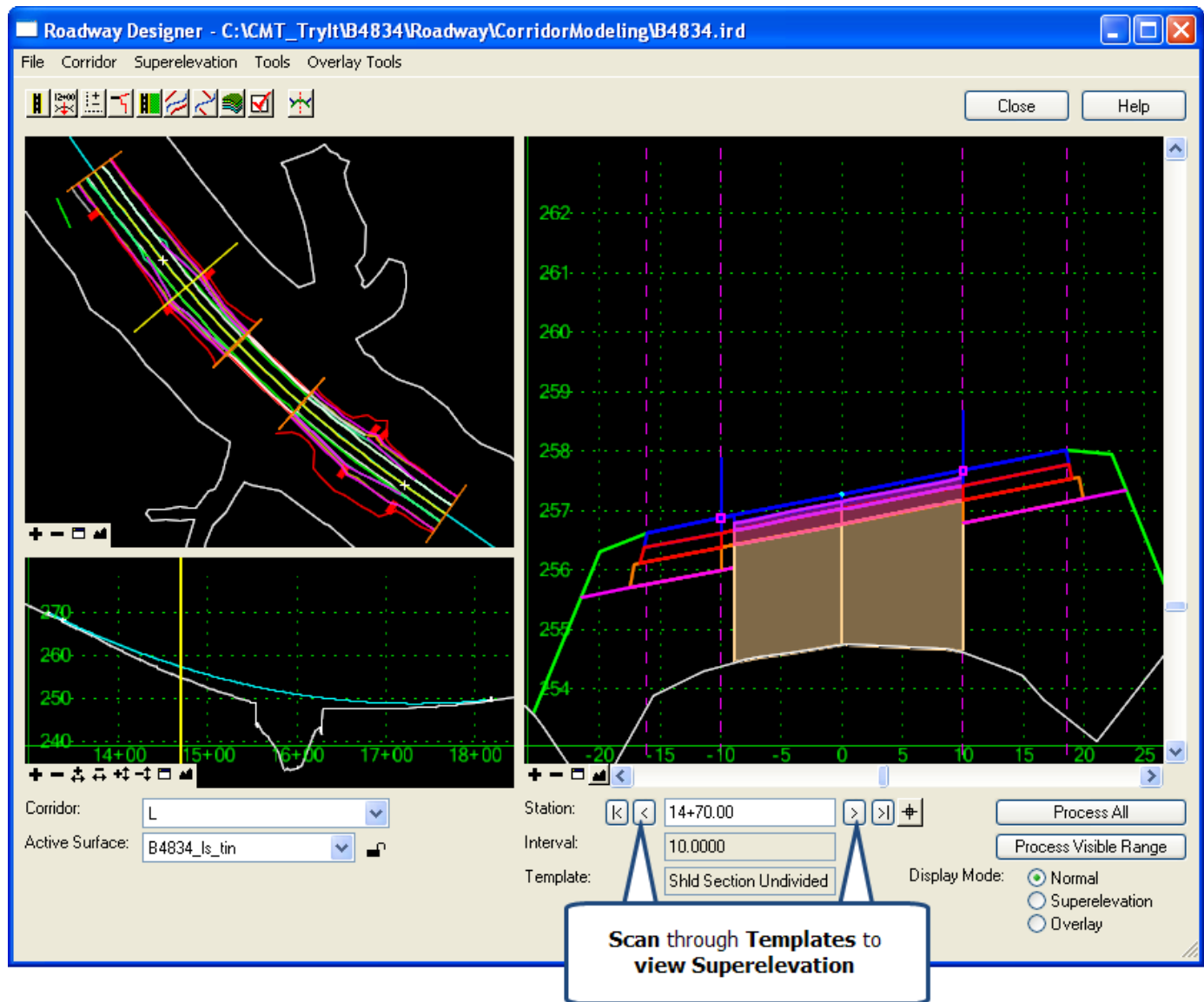
Section: L

File: C:\NCDOT Training\Roadway\CM\Chapter 1 - Intro to ...

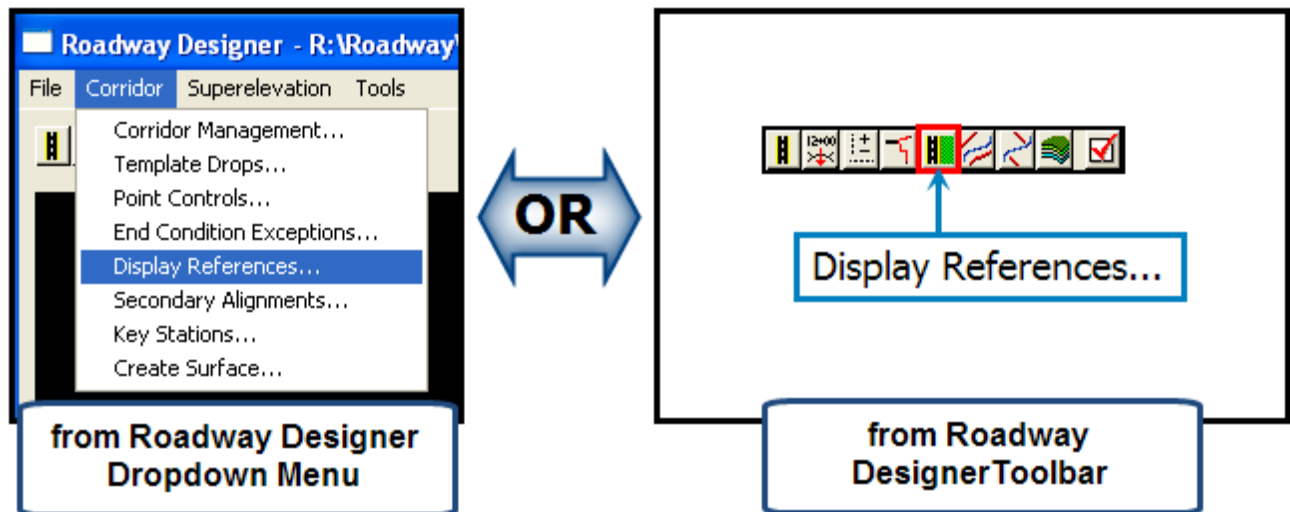
Point	Offset	Pivot Point	Station	Cross Slope
LT_PV1_OEOT	-10.0000	PV1_PGL	13+20.00	-2.00%
RT_PV1_OEOT	10.0000	PV1_PGL	13+20.00	-2.00%

- 1.)** Type in **Name of Selection: L**
- 2.)** Click to **Select Path of .INP File (Chapter 1 folder):**
- 3.)** Using **Dropdown** dialog, select **Point: LT_PV1_OEOT**
- 4.)** Using **Dropdown** dialog, select **Point: RT_PV1_OEOT**
- 5.)** Click on to **add "Superelevation" to the Model.**
- 6.)** Click to **Close "Import Superelevation from .INP file"**

Scan Through Templates to View Superelevation:



E4.7 Display References...

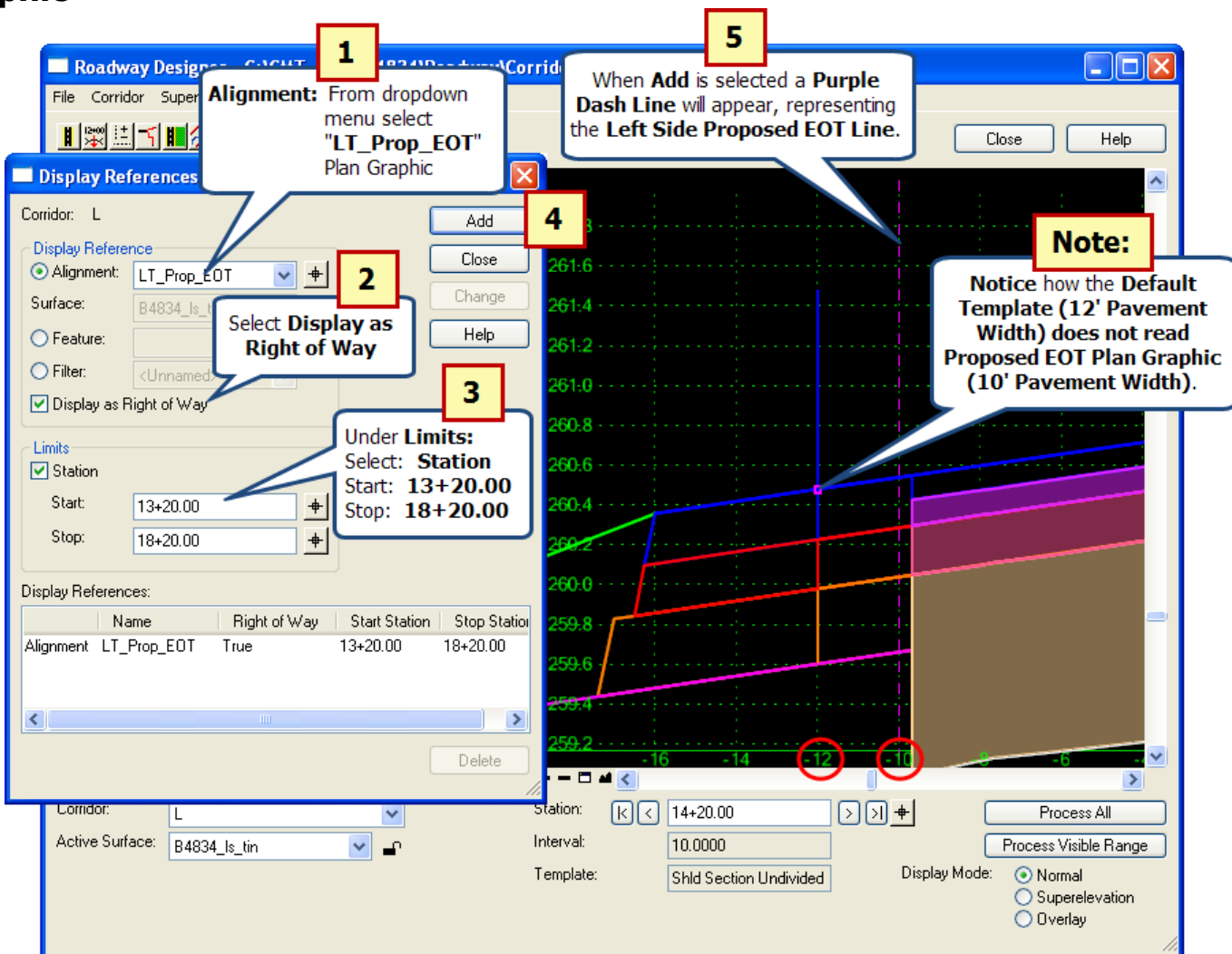


Using “Display References...” to Check for Errors

Listed below are **Two Common Problems** which “**Display References...**” could help the user to visualize:

- Default Template is designed to seek for “Proposed EOT” Plan Graphics from a default pavement width of 12’. If your project Plan Graphics is shown using a 10’ proposed pavement width then the default template will not be able to find Plan Graphics (because it falls behind the 12’ point).
- Default Template is designed to use a 4’ “Proposed Paved Shoulder”. If your project Plan Graphics shows the Proposed Paved Shoulder of less than 4’ then the default template will not be able to find the Plan Graphics (because it falls behind the 4’ point).

Using "Display References..." to Add "Left Side Proposed EOT" Plan Graphic

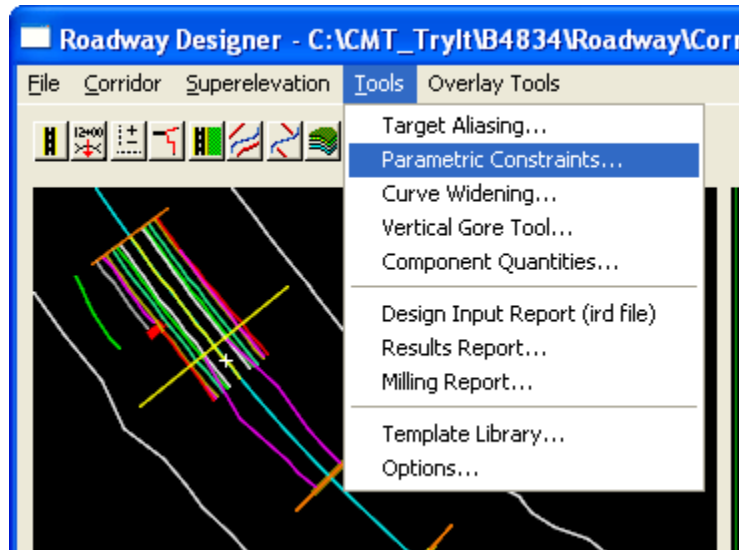


- 1.)** Under "Display Reference" select **Alignment** drop down:
Choose **LT_Prop_EOT**
- 2.)** Select ☒ next to "Display as Right of Way"
- 3.)** Under "Limits" select ☒ next to **Station**
Next to **Start:** type **13+20.00**
Next to **Stop:** type **18+20.00**
- 4.)** Click to add **LT_Prop_EOT** to list.
- 5.)** After **adding to list**, a **Purple Dashed Line** will display in **Cross Section View** (representing the left Side Proposed EOT Line).

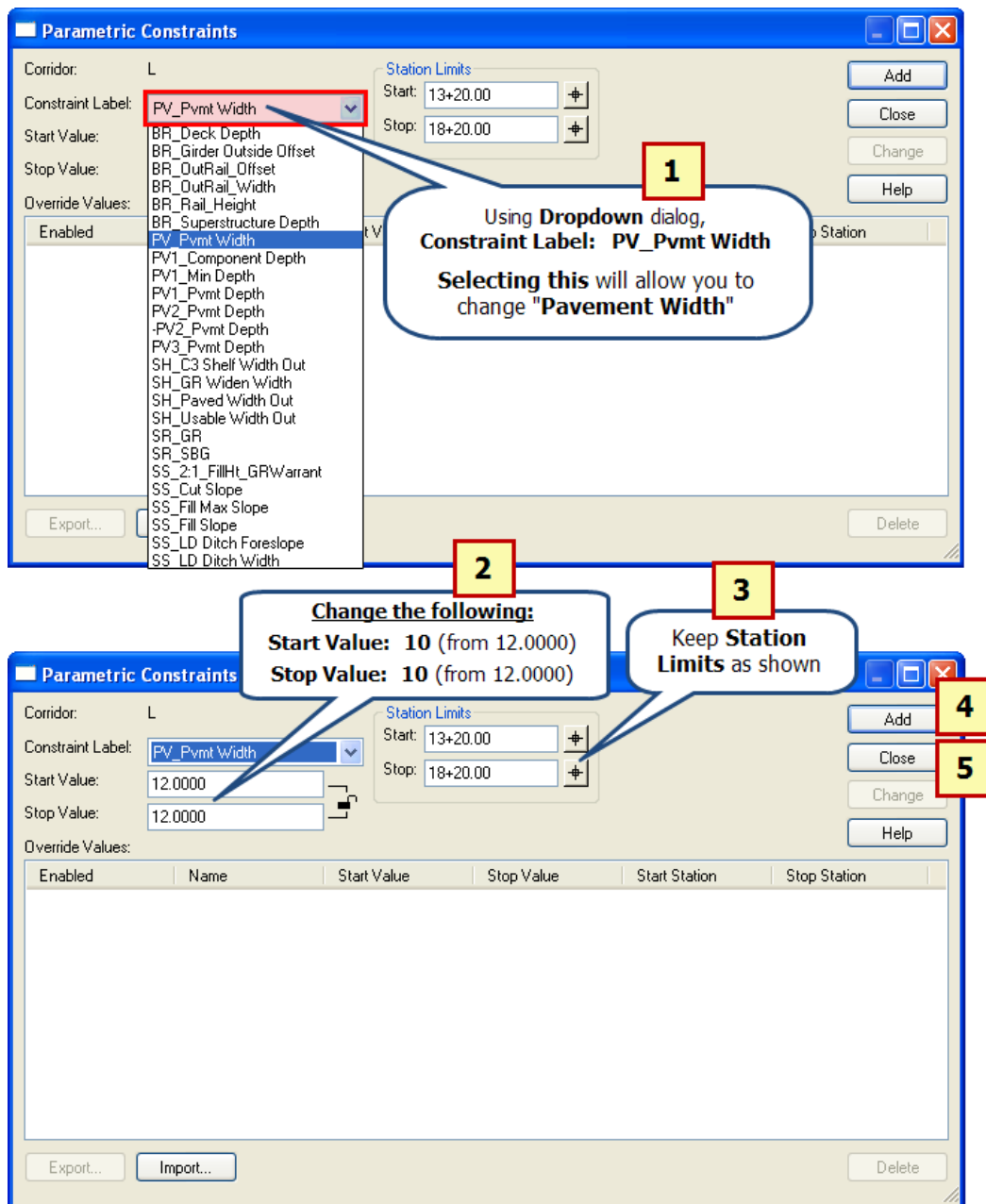
Note: Repeat this process to add **RT_Prop_EOT** to list.

How to Open Parametric Constraints

- By using the Tools Dropdown Menu:

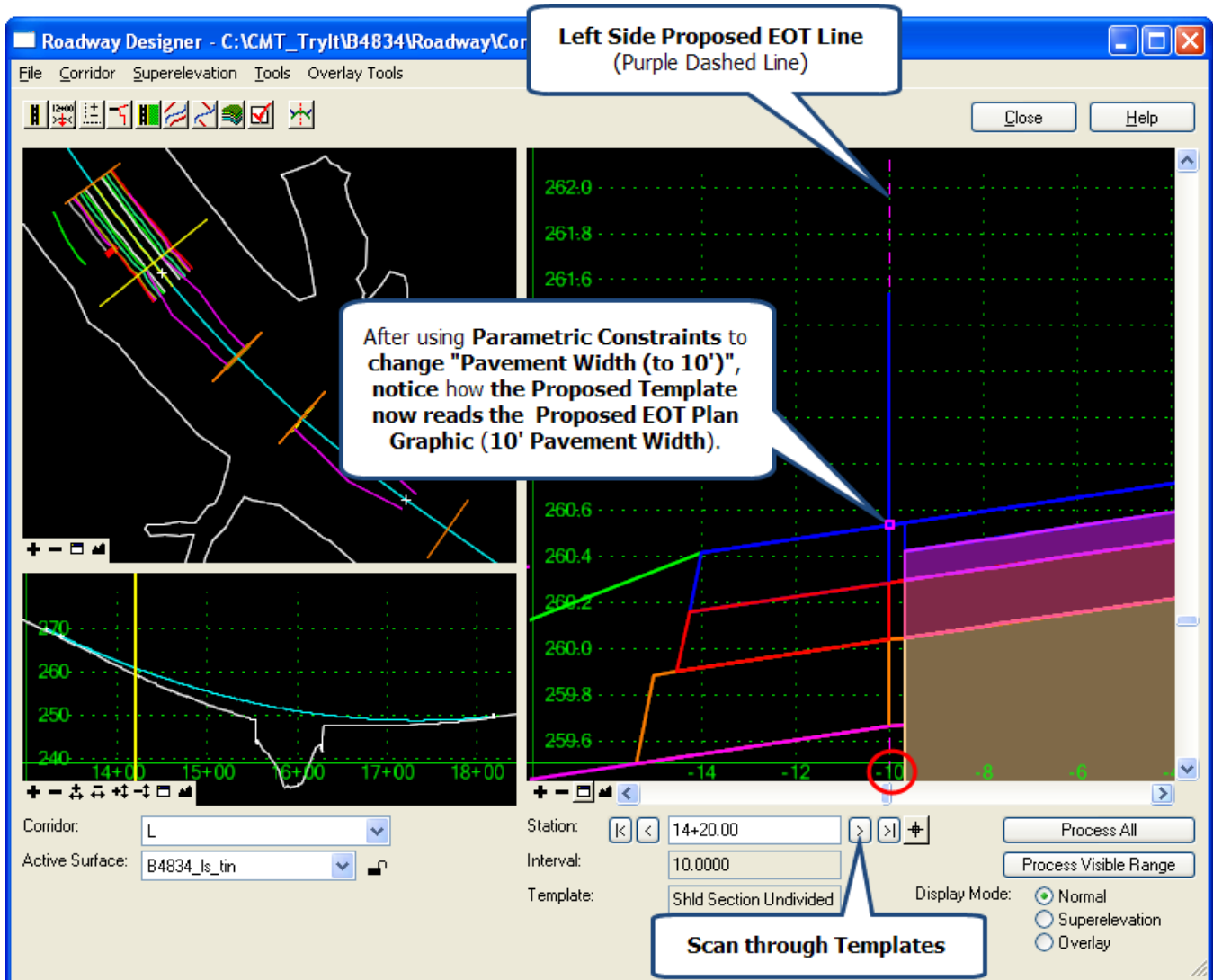


Using "Parametric Constraints" to Correct Pavement Width

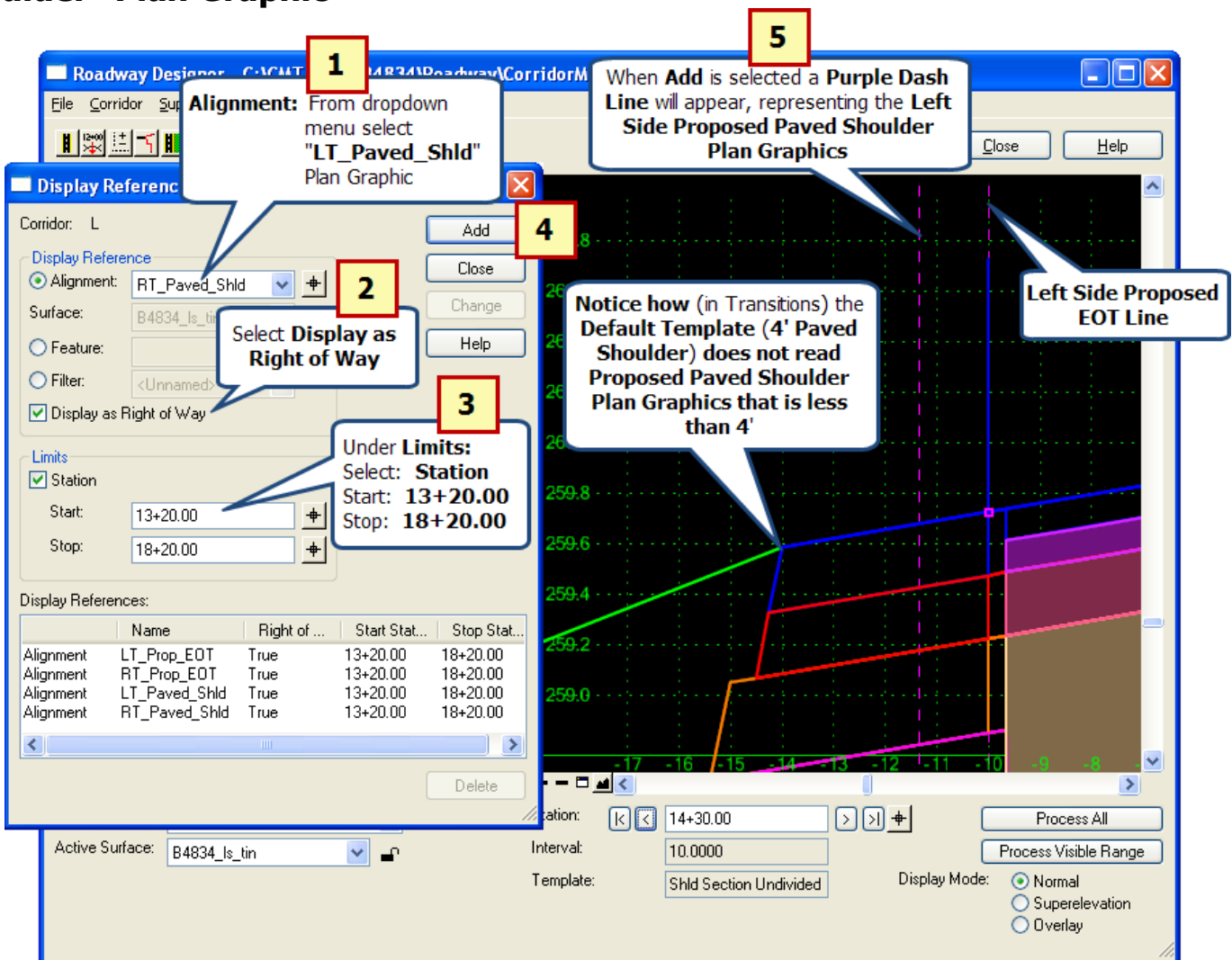


- 1.)** Using **Dropdown** dialog, **Constraint Label: PV_Pvmt_Width**
- 2.)** Change **Start & Stop Value: 10** (from 12.0000)
- 3.)** Keep **Station Limits** as shown:
Start: 13+20.00
Stop: 18+20.00
- 4.)** Click on **Add** to **Change "Pavement Width" in Model.**
- 5.)** Click **Close** to **Close "Parametric Constraints"**

Scanning through Cross Sections to Verify "Pavement Width" Change



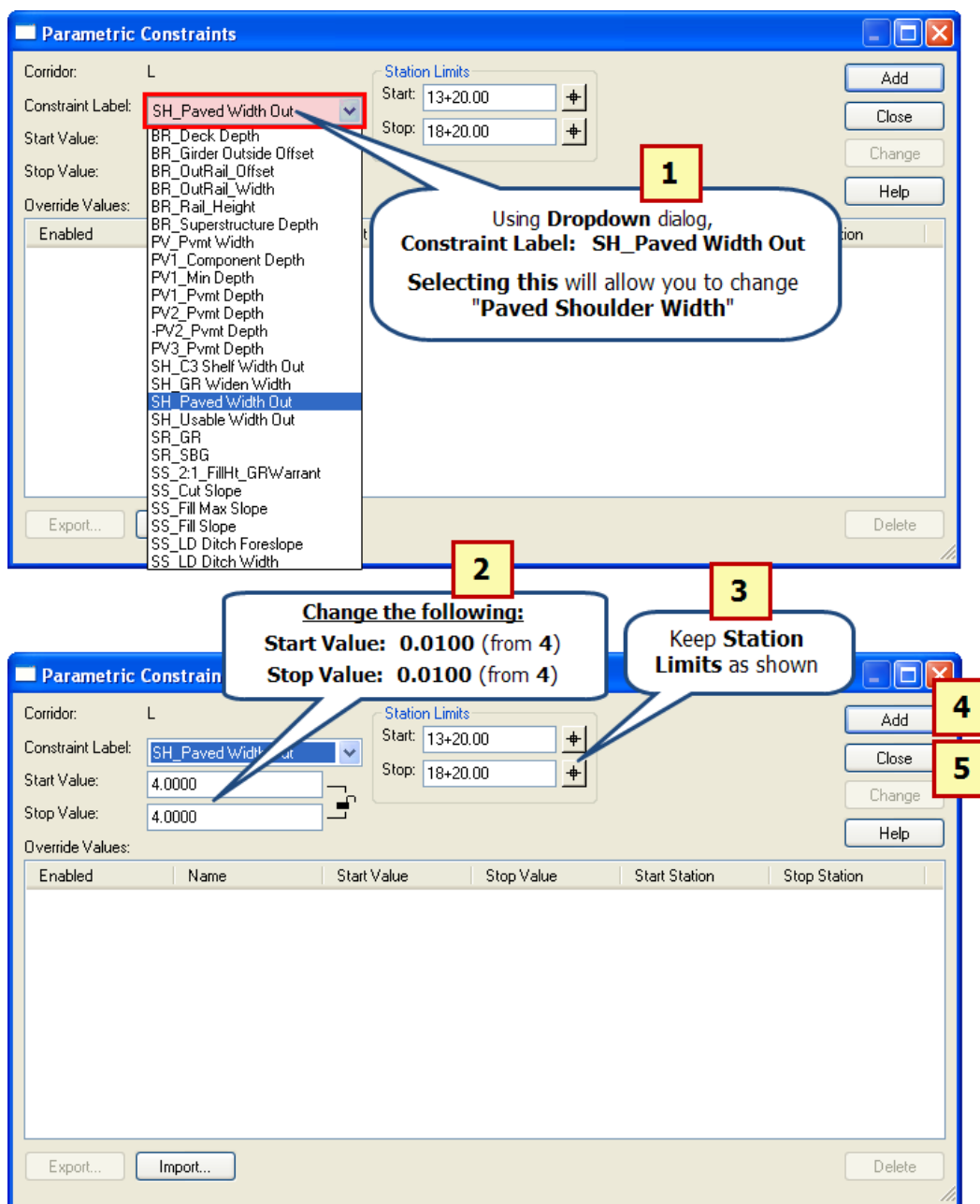
Using "Display References..." to Add "Left Side Proposed Paved Shoulder" Plan Graphic



- 1.)** Under "Display Reference" select **Alignment** drop down:
Choose **LT_Paved_Shld**
- 2.)** Select ☒ next to "Display as Right of Way"
- 3.)** Under "Limits" select ☒ next to **Station**
Next to **Start:** type **13+20.00**
Next to **Stop:** type **18+20.00**
- 4.)** Click **Add** to add **LT_Paved_Shld** to list.
- 5.)** After adding to list, a **Purple Dashed Line** will display in **Cross Section View** (representing the **Left Side Paved Shoulder**).

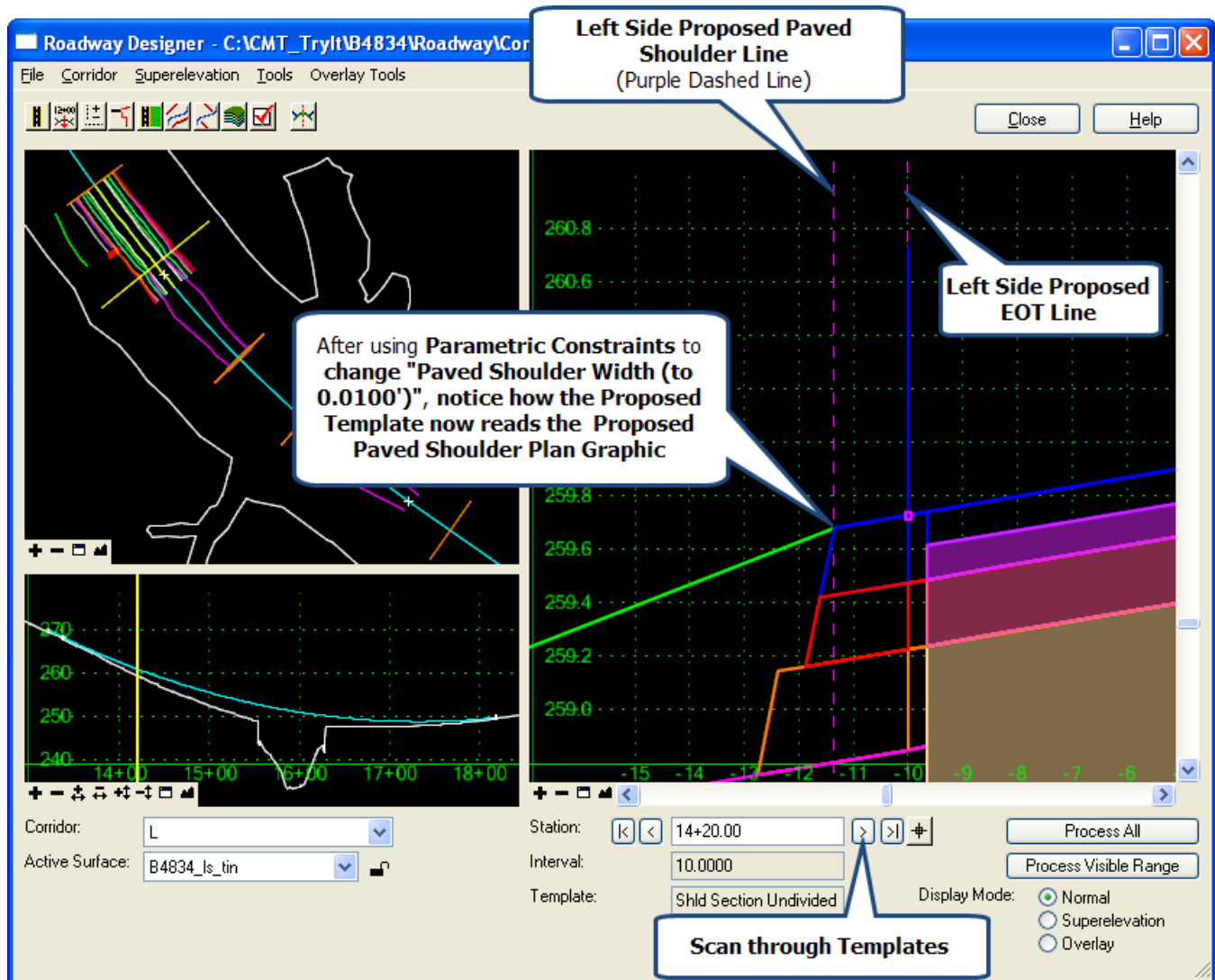
Note: Repeat this process to add **RT_Paved_Shld** to list.

Using "Parametric Constraints" to Change "Paved Shoulder Width"



- 1.) Using **Dropdown** dialog, **Constraint Label: SH_Paved Width Out**
- 2.) Change **Start & Stop Value: 0.0100** (from 4.0000)
- 3.) Keep **Station Limits** as shown:
Start: 13+20.00
Stop: 18+20.00
- 4.) Click on **Add** to **Change "Paved Shoulder Width" in Model.**
- 5.) Click **Close** to **Close "Parametric Constraints"**

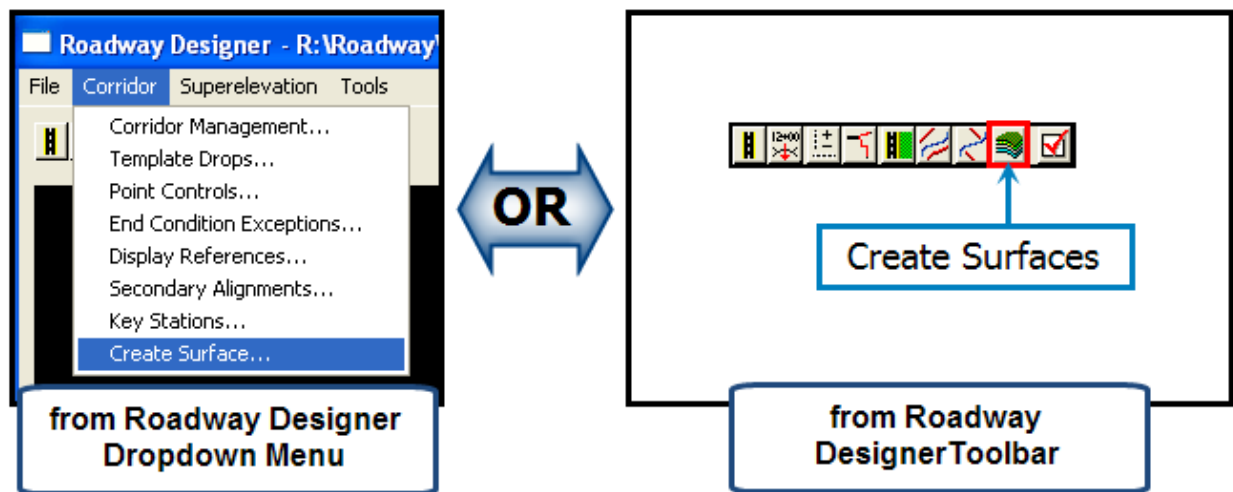
Scanning through Cross Sections to Verify "Paved Shoulder Width" Change



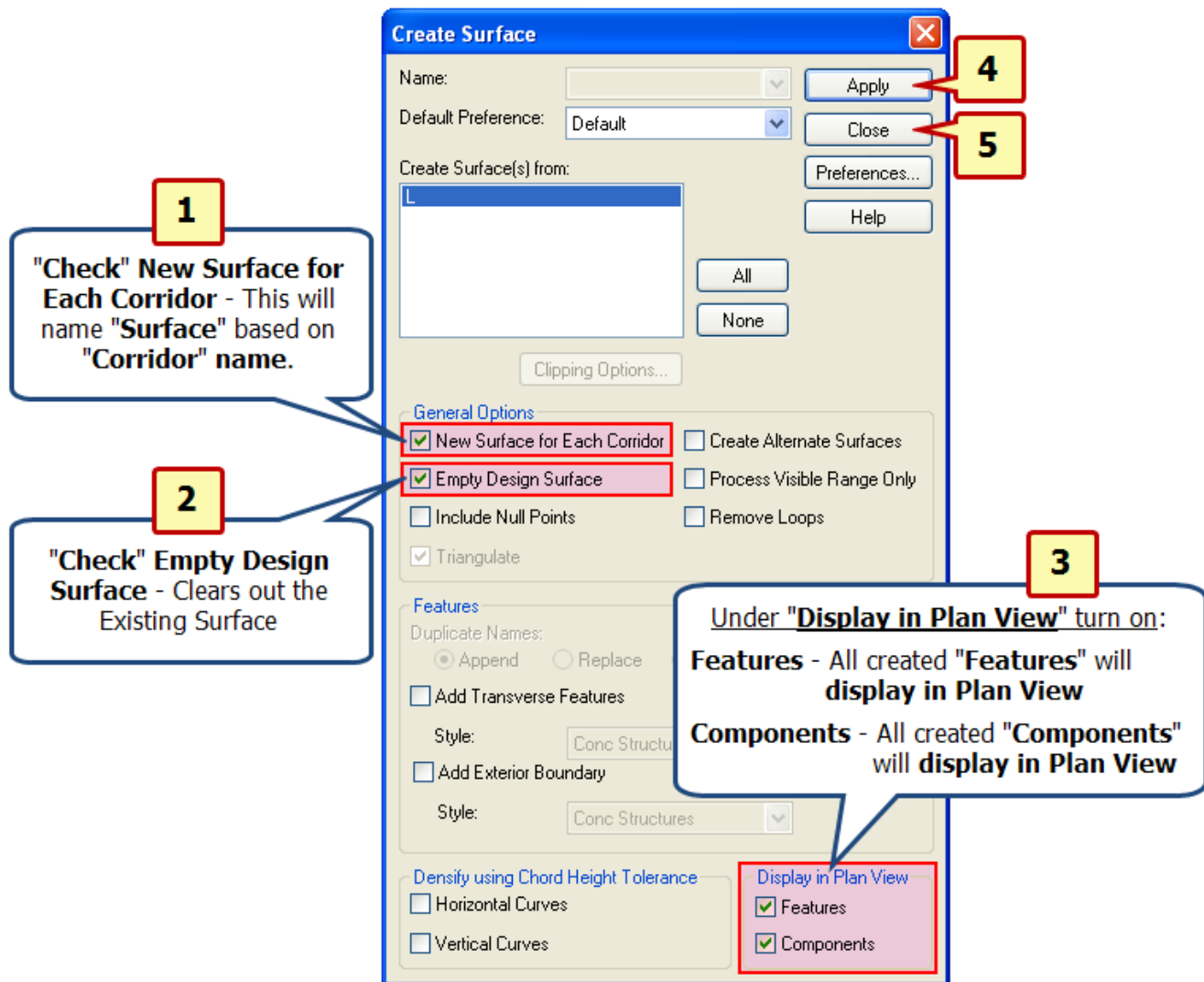
E4.8 Create Surface

Open “Create Surface(s)...”

- By using the Corridor Dropdown Menu or by using the Roadway Designer Toolbar:



How to Create Surface



- 1.) Click ☒ **New Surface for Each Corridor.**
- 2.) Click ☒ **Empty Design Surface.**
- 3.) Click ☒ **Features.**
Click ☒ **Components.**
- 4.) Click on to **create "Surface L".**
- 5.) Click to **Close "Create Surface".**
- 6.) Save **IRD File.**

Files Created during “Create Surface” Process

The **Create Surface Process** creates the following files (stored in the **CorridorModeling Folder**):

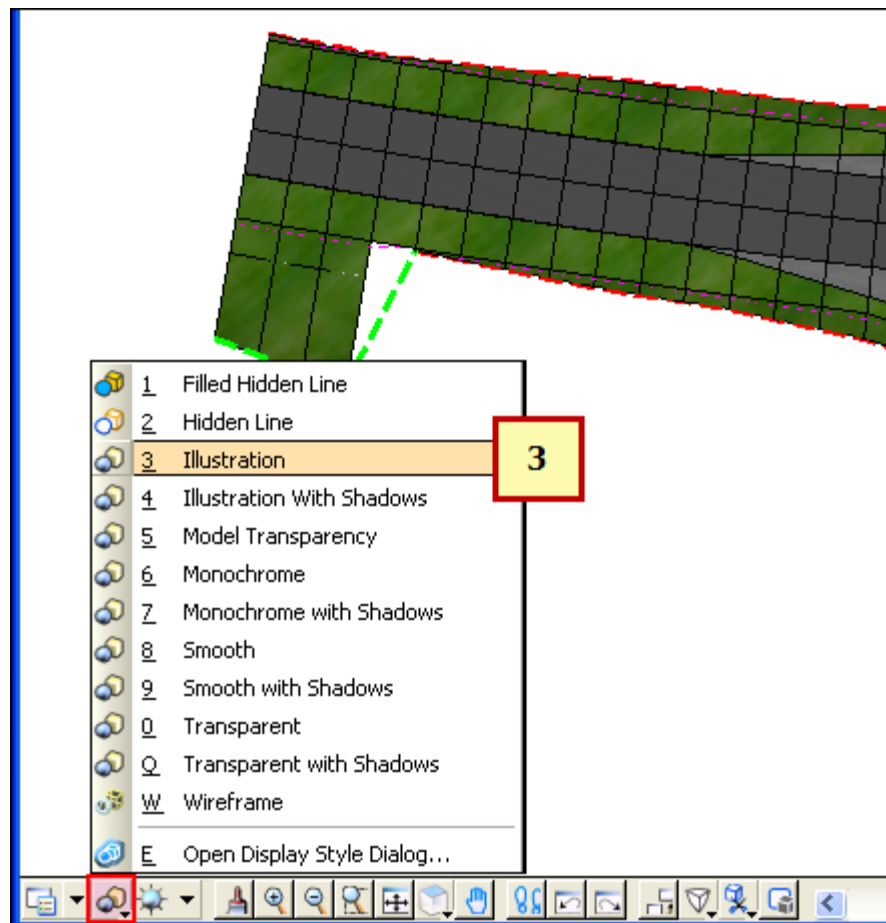
L.DTM – Proposed 3D Model DTM

L.TIN – Geopak Tin File

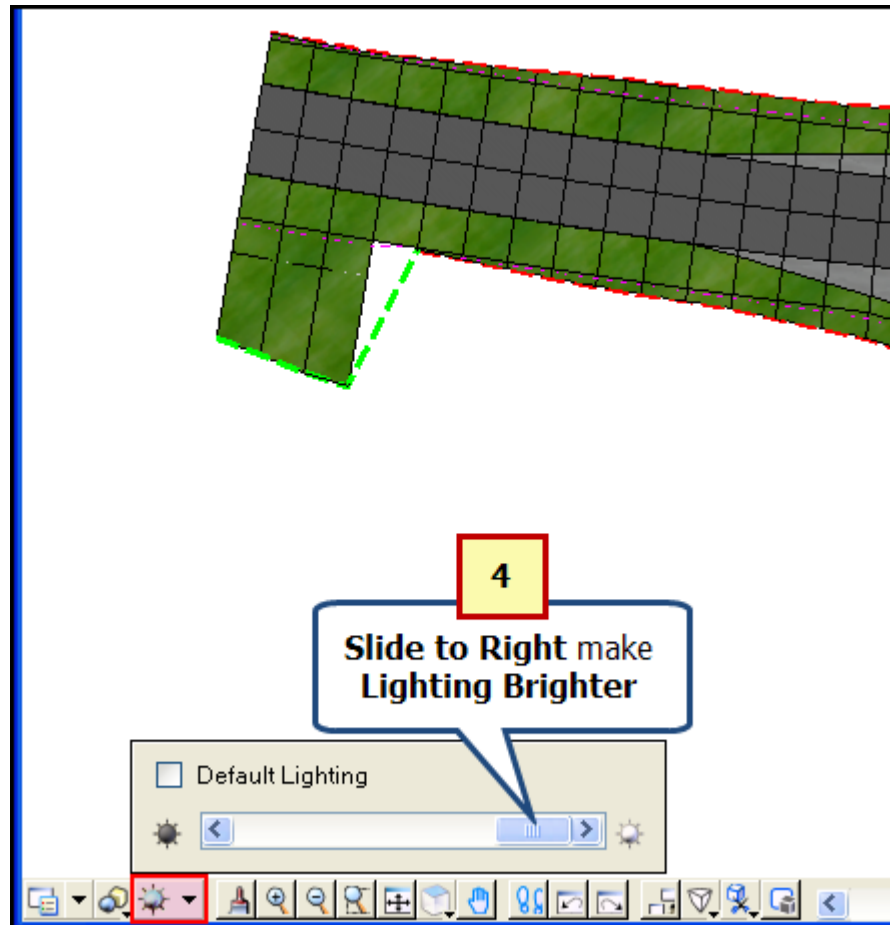
E4.9 Basic Rendering of 3D Model

Use “View Display Mode” to View Basic Rendering of Model

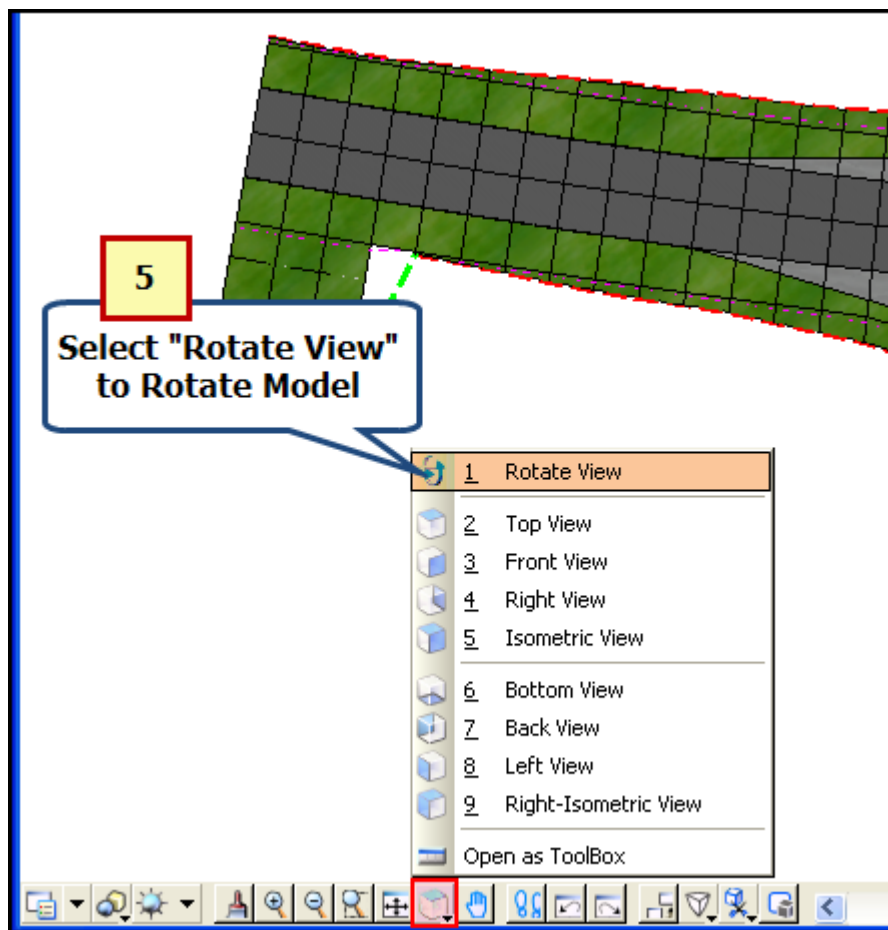
- 1.) Turn off both **Reference Files**.
- 2.) “Fit View” to center **Model**.
- 3.) In **Lower Left Corner** of “View 1” click on “**View Display Mode**” scrolling up to select “**Illustration**”.



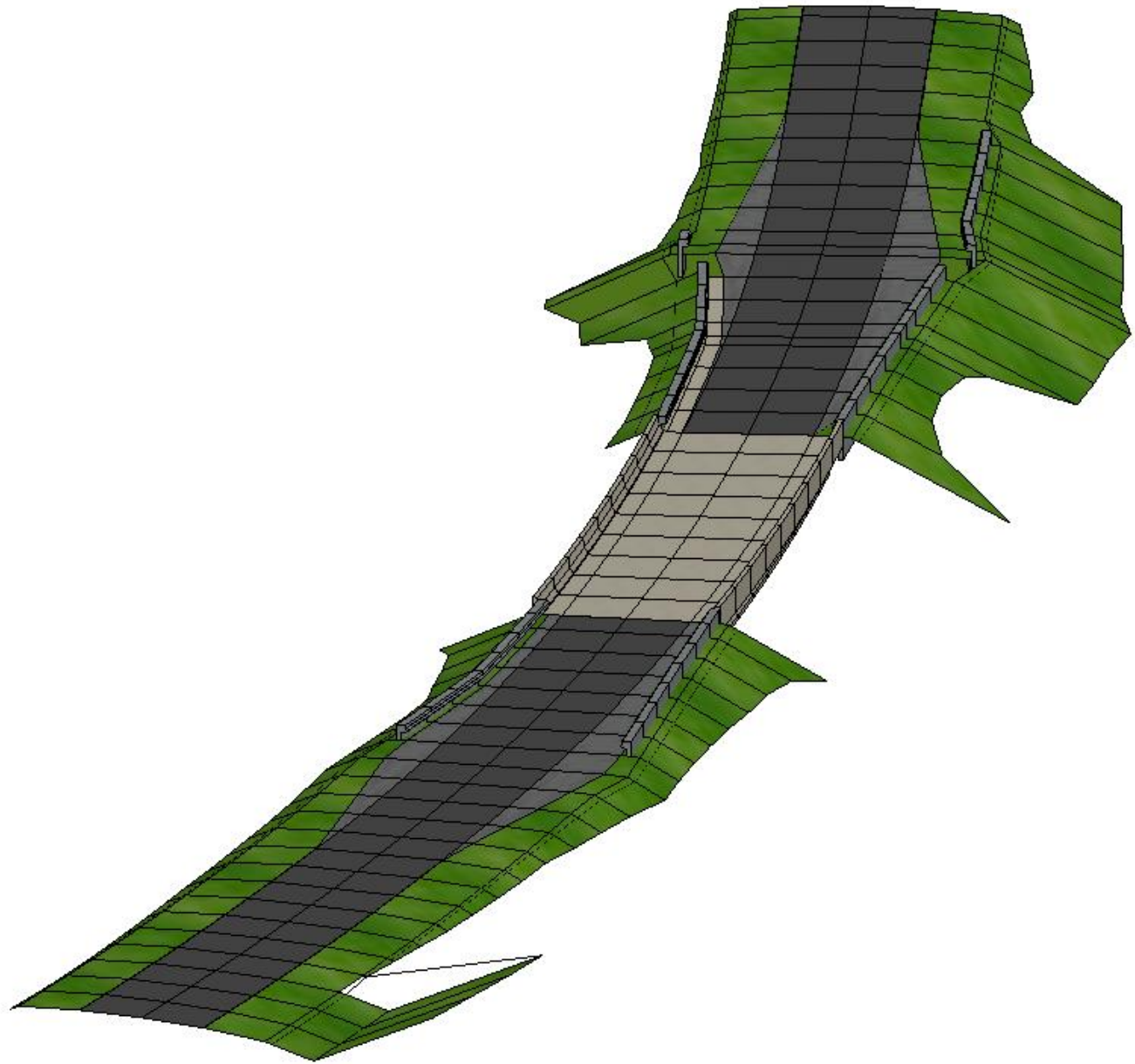
- 4.) Select **"Adjust View Brightness"** and **Slide "Bar" to the Right** to make **Lighting Brighter**.



- 5.) Under "View Rotation", Select "Rotate View". Select and Hold Down "Left" Mouse Button (while moving mouse) to Rotate Model (in 3D).**



Picture of Rotated Rendered 3D Model

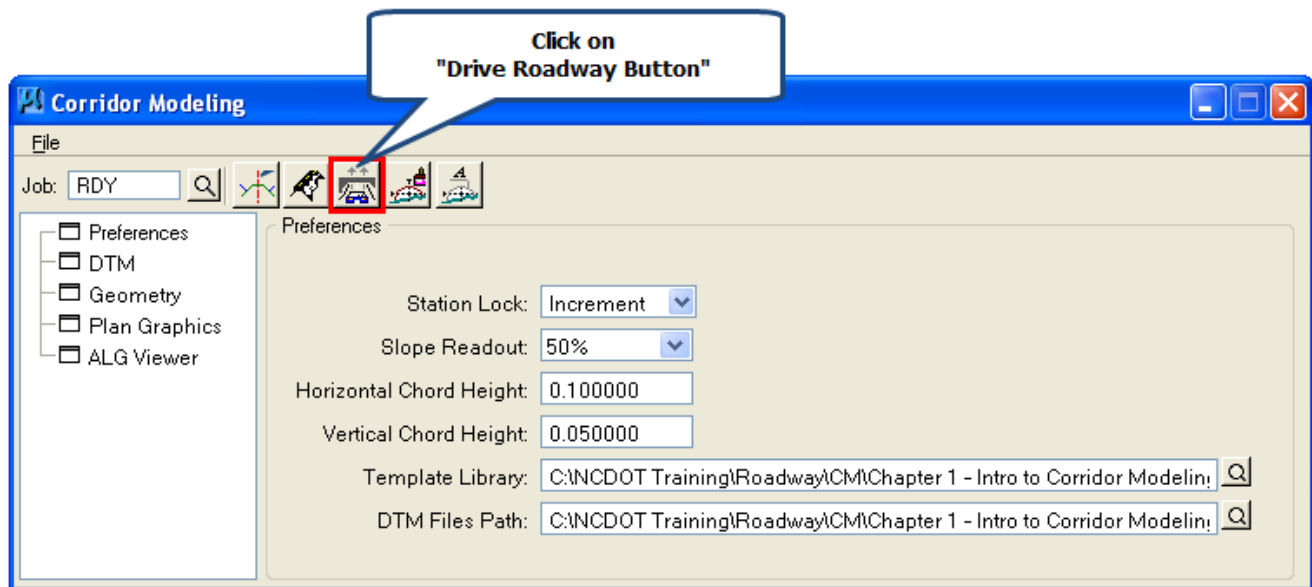



E4.10 Close "Roadway Designer"

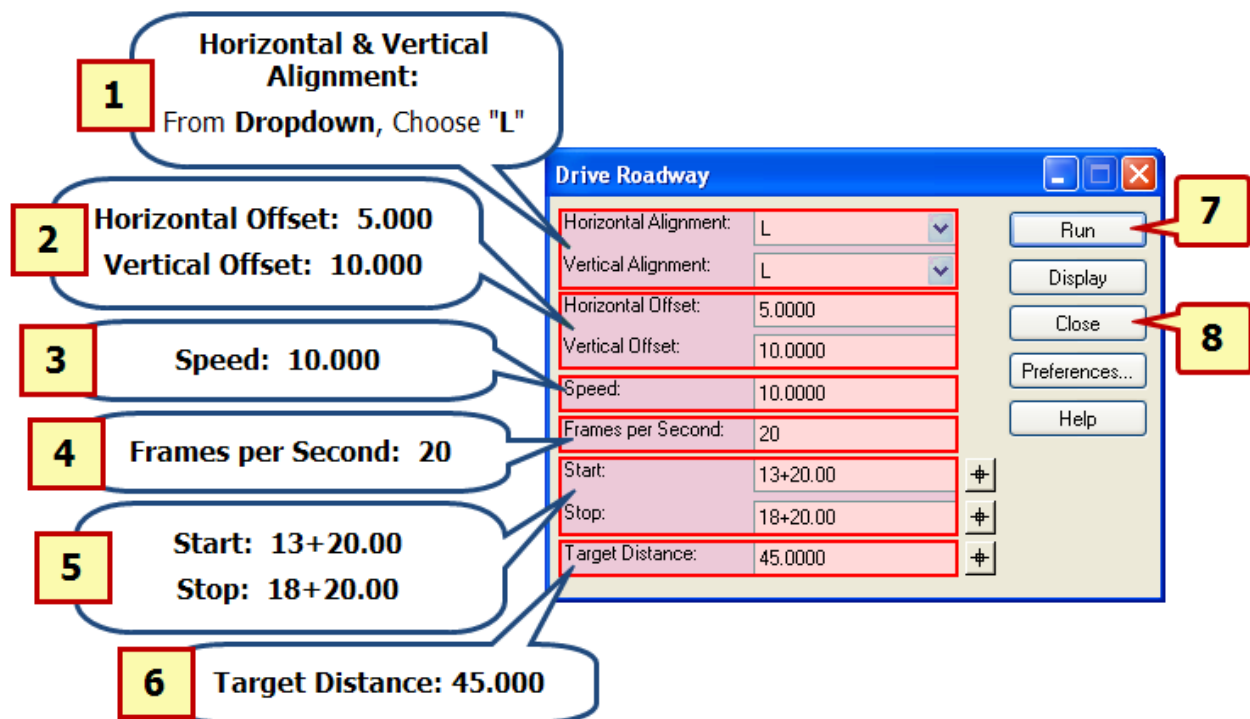
- Click on "Close" to End "Roadway Designer" Session.

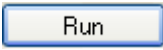

Exercise 5: Drive Roadway

E5.1 How to Start "Drive Roadway"

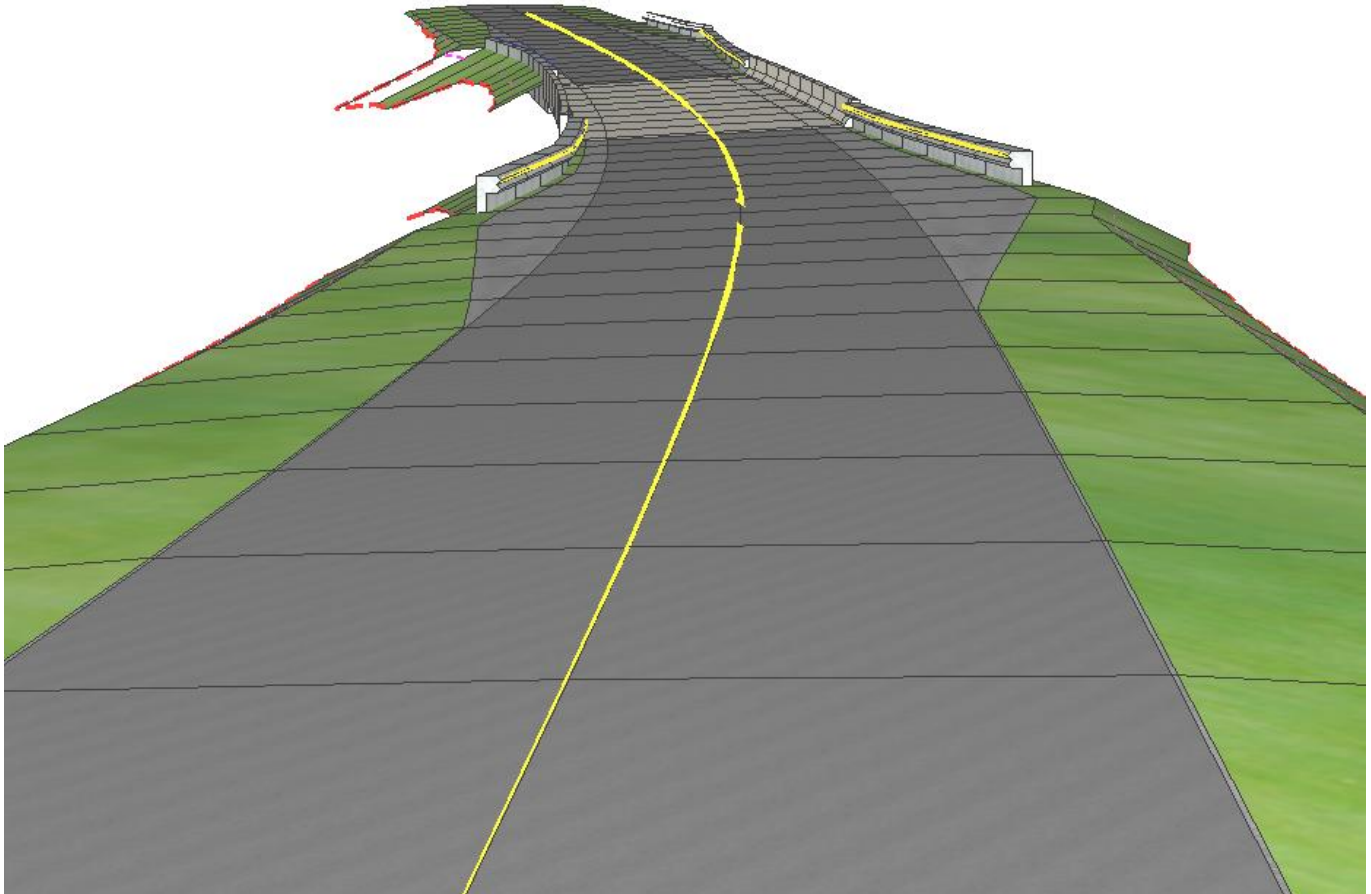


- Under "Corridor Modeling Dialog Window" click on  "Drive Roadway Button".



- 1.) Horizontal Alignment: Choose **L**
Vertical Alignment: Choose **L**
- 2.) Horizontal Offset: **5.000**
Vertical Offset: **10.000**
- 3.) Speed: **10.000**
- 4.) Frames per Second: **20**
- 5.) Next to **Start: 13+20.00**
Next to **Stop: 18+20.00**
- 6.) Target Distance: **45.000**
- 7.) Click  to Start **Drive Roadway**.
- 8.) Select  to **Drive Roadway**.

Drive Roadway Example



Exercise 6: Draw Cross Sections from Surfaces

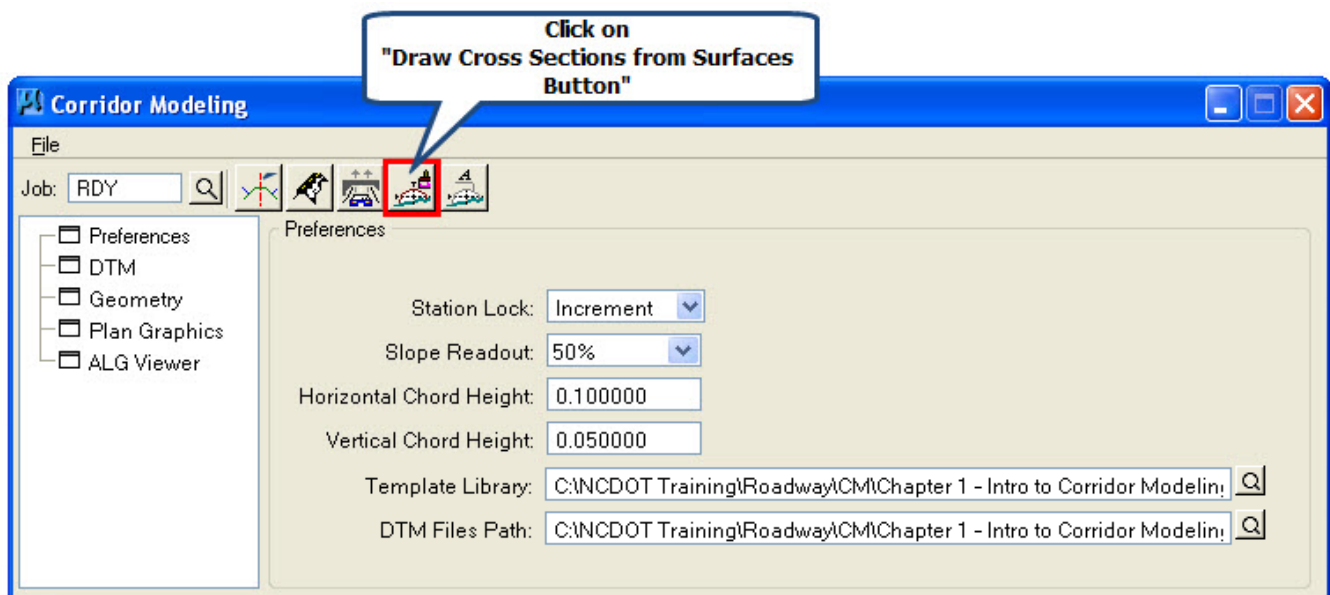
Draw Cross Sections from Surfaces Overview

- Draws **Cross Sections** based on “**Existing Ground**” and “**Proposed Model DTM**” DTM files.
- Even though “**Draw Cross Sections from Surfaces**” is accessed from “**Corridor Modeling Dialog Window**” it is the **same “dialog” used in Geopak**.
- **Allows user to draw “Existing Ground & Proposed” cross sections at the same time.**

E6.1 How to Start “Draw Cross Sections from Surfaces”

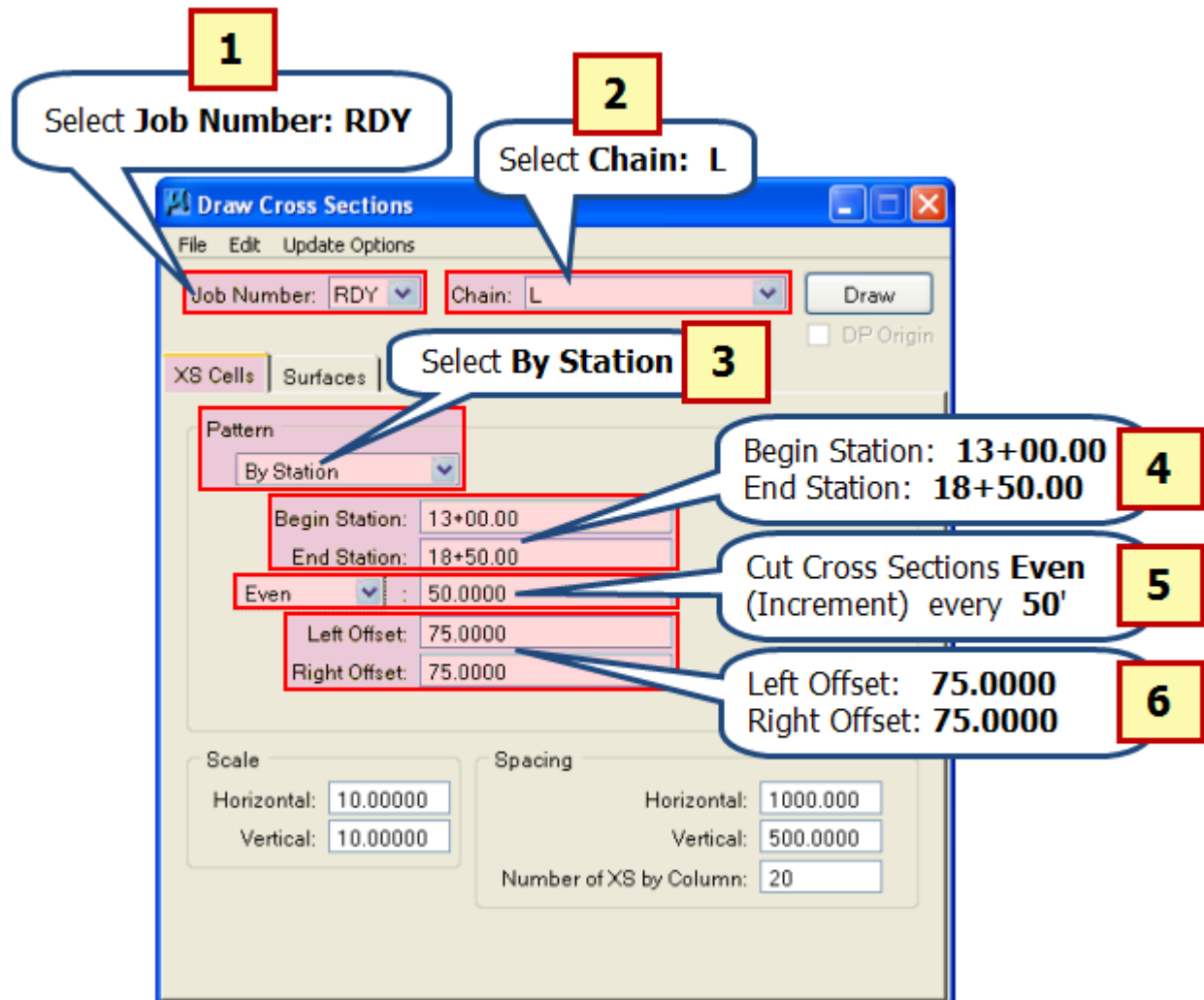
Note: Before Getting Started....

You will need to **Move** and **Open** the “b4834_rdy_xsc_cm.dgn (located in Roadway\XSC folder) into the “CorridorModeling” folder.



- Under “Corridor Modeling Dialog Window” click on  “Drive Roadway Button”.

E6.2 "XS Cells" Tab



- 1.) Select Geopak **Job Number: RDY**
- 2.) Select Geopak Chain: **L**
- 3.) Under **Pattern**, Select **By Station**
- 4.) **Begin Station:** type **13+00.00**
End Station: type **18+50.00**
- 5.) Choose **Even** increment cut every **50** feet.
- 6.) **Left Offset:** type **75.0000**
Right Offset: type **75.0000**

E6.3 "Surfaces" Tab – Adding Existing Ground Cross Section Data

- Add "Existing Ground Cross Section Data" as shown below:

1

Details
 Select: **Dtm File:**
 Choose: **B4834_Is_tin.dtm**
 (in RDDBS Folder)
 Method: **Triangles**

2

Display Settings
 Select: **By Level Symbology**
Under "Set Feature"
 Level: **Exist XS Ground Line**
 Color: **ByLevel**
 Style: **(3) ByLevel**
 Weight: **(3) ByLevel**

3

Set Feature
 Level: **Exist XS Center Line Label**
 Color: **ByLevel**
 Weight: **(2) ByLevel**
Text Preferences
 Th: **0.180**
 Tw: **0.180**
 Ft: **11 GEOMETRICFUTURA_211M_L**
 Decimal: **2**
 Dropdown List: Change to **TH/TW Fixed**
 Angle: **0.000**
Anchor Point Shift
 Horizontal: **0.00**
 Vertical: **-4.000**

4

Select **Void**
Under "Set Feature"
 Level: **Exist XS Void Line**
 Color: **ByLevel**
 Style: **(2) ByLevel**
 Weight: **(3) ByLevel**

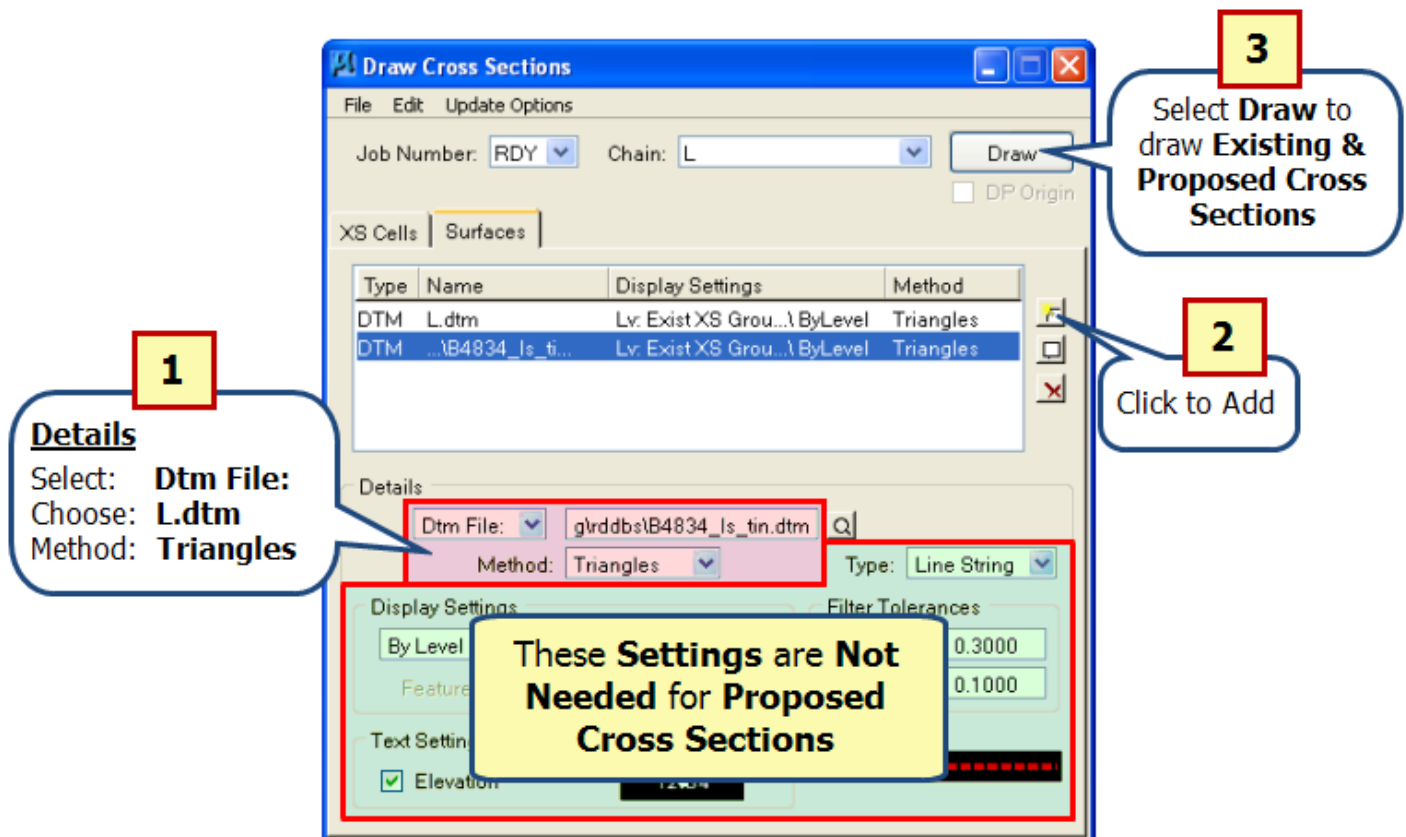
5

Click to Add

The screenshot shows the 'Draw Cross Sections' dialog box. The 'Surfaces' tab is selected. The 'Type' column in the table lists 'DTM' with the name 'B4834_Is_tin.dtm' and 'Method' 'Triangles'. The 'Details' section shows 'Dtm File' as 'g:\rddb\B4834_Is_tin.dtm' and 'Method' as 'Triangles'. The 'Display Settings' section shows 'By Level Symbology' selected. The 'Text Settings' section shows 'Elevation' checked. The 'Filter Tolerances' section shows 'Horizontal' as 0.3000 and 'Variance' as 0.1000. The 'Void' checkbox is checked.

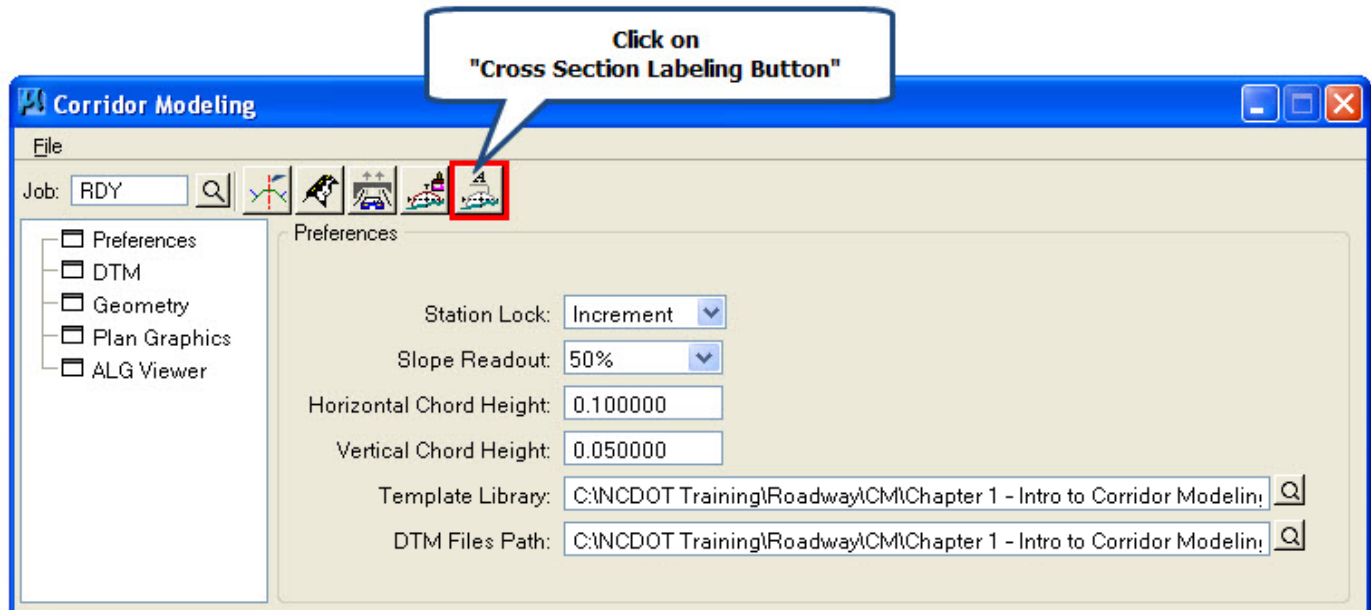
E6.4 “Surfaces” Tab – Adding Proposed Cross Section Data

- Add “Proposed Cross Section Data” as shown below:

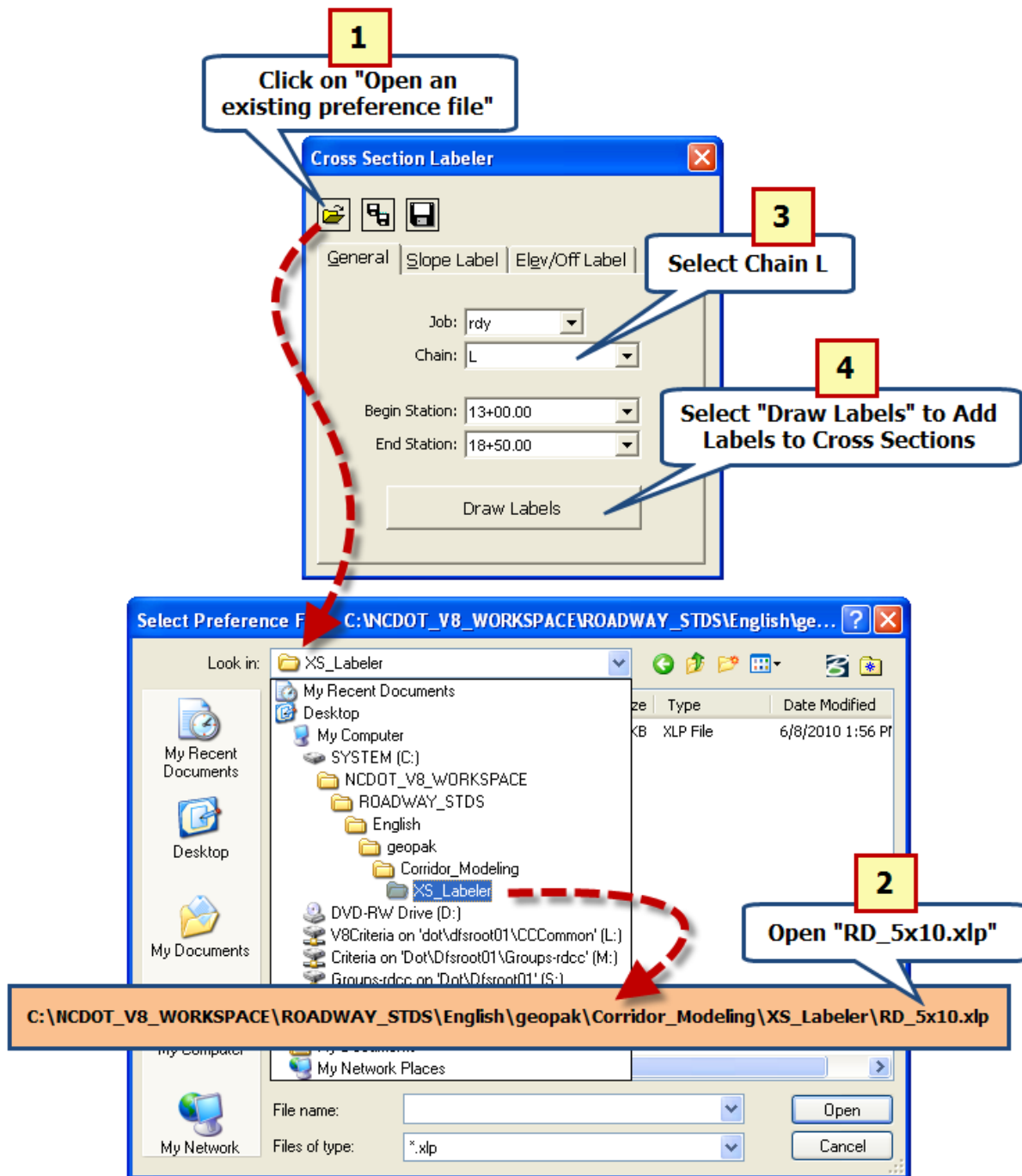


Exercise 7: Cross Section Labeling

E7.1 Starting "Cross Section Labeling"



E7.2 Using "Cross Section Labeling"



- 1.) Click on "Open an existing preference file"
- 2.) Using path shown above, Open: **RD_5x10.xlp**
- 3.) Select Chain: **L**
- 4.) Select **Draw Labels** to **Add Labels to Cross Sections**.